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**URBAN REDEVELOPMENT:
PROBLEMS AND PRACTICES**

Urban Redevelopment Study

(1948-1951)

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DIRECTOR

COLEMAN WOODBURY

URBAN REDEVELOPMENT: PROBLEMS AND PRACTICES

By

CHARLES S. ASCHER

WILLIAM H. LUDLOW

JACK MELTZER

SHEILAH ORLOFF

IRA S. ROBBINS

WILLIAM L. SLAYTON

ALLAN A. TWICHELL

MARIAN PERRY YANKAUER

Edited by

COLEMAN WOODBURY



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THIS VOLUME IS DEDICATED TO

CHARLES E. MERRIAM

IN GRATITUDE FOR HIS FRIENDSHIP AND
COUNSEL AND IN RECOGNITION OF HIS DISTINGUISHED
CONTRIBUTIONS, BOTH IN THOUGHT AND ACTION,
TO THE LIFE OF CITIES IN THE
UNITED STATES

PREFACE

THIS volume and its companion—*The Future of Cities and Urban Redevelopment*—are the chief products of the Urban Redevelopment Study.

Quite early in its existence, the Study defined urban redevelopment rather broadly—as those policies, measures, and activities that would do away with the major forms of physical blight in cities and bring about changes in urban structure and institutions contributing to a favorable environment for a healthy civic, economic, and social life for all urban dwellers.

With this definition as a guide, the Study identified a number of subjects, problems, and issues for investigation, analysis, and discussion. These fall into three broad categories: (*a*) major operating problems and practices in local redevelopment programs, (*b*) underlying factors in urban growth and development that, more or less directly, have helped to produce the problems now faced by redevelopment agencies and on which some substantial changes in public understanding and policy would seem to be required if the long-term objectives of redevelopment are to be realized, and (*c*) certain questions of objectives and values that underlie many of the actual program and policy issues. As their titles indicate, this volume deals primarily with the first of these divisions of subject matter; its companion with the second and third. For all sections of its program, whatever their complexities, the Study has tried to define clearly the problems and issues, to show their relations to the long-term goals of redevelopment, to analyze available experience and published materials, at some points to recommend policies and procedures and, at others, to suggest further inquiries and research.

Throughout the Study, the emphasis has been on conditions, problems, issues, and possibilities primarily in urban communities of this country. Although many of the issues and potentialities of urban redevelopment cannot be confined to municipal or even metropolitan areas, relatively little attention has been given here to policies and programs of federal or state governments. Of course, federal and state responsibilities in urban redevelopment are substantial and their programs deserve analysis and review. It seems quite likely, however, that these matters will not be ignored. Besides, URS' agenda was put together before most of the federal and state programs of grants and other aids

had been in operation long enough to be studied effectively. These reasons as well as the complex and urgent nature of many of the local questions in redevelopment seemed to justify this orientation of the Study at this time.

In general, the Study has tried to reach four groups: (1) public officials, elected and appointed, who are in positions to influence public policies and administrative action in urban redevelopment; (2) civic leaders and other private citizens who also are concerned with substantive issues of policy and method; (3) prospective investors in redevelopment projects—both individuals and institutions; and (4) professional students of urban life and institutions, in universities and elsewhere, who may be expected to contribute to the further understanding of many issues and questions in this and allied fields. Quite probably, the different parts of the Study's output will vary in interest among the members of these groups. We hope, however, that most sections will prove useful to at least many persons in all four. To this end, those chiefly responsible for the investigation and writing have tried to put their findings and conclusions in reasonably clear, nontechnical English.

When the Study was started, urban redevelopment as an organized activity in this country was in its early infancy. The major proposal for federal aid was still before the Congress and was not to be passed until about a year later. A few states and major cities had made funds available for a start. In most urban localities, however, redevelopment was only a subject of exploration and discussion among relatively small groups of officials and private citizens.

Although its start almost at the beginning of public activity in urban redevelopment gave the Study an unusual opportunity, it also posed some problems of program and procedure in addition to those that are common to all studies of urban life and affairs. The absence of any considerable body of accumulated experience that could be analyzed and compared from locality to locality aggravated the difficulties of research in some subareas and made it impossible in others. Several persons who could have made important contributions to the Study could not be spared from administrative and advisory jobs with federal or local agencies. Inflation also played its usual part in such matters. In these circumstances it has not been possible to cover all phases of so wide and complex a public-private undertaking nor to treat definitively any segment of it.

The division of work and responsibility in URS can be stated briefly. The Administrative Committee passed upon the major objectives and formulations of the program from time to time. It reviewed and established budgets submitted by the Director. Its members also read and criticized drafts of most of the sections but are not responsible for

them—either as to content or organization. The Director, with the advice of members of the Administrative Committee and others, formulated the Study's program, made preliminary outlines of the subjects for study, made arrangements with the researchers and writers, advised with them during their work, and edited their products.

For considerable periods of time, Mr. William L. Slayton as Assistant Director of the Study and Mr. Frank Cliffe as Research Assistant were members of the full-time staff. The other contributors worked primarily on their special subjects. Several of them came to the Study's headquarters in Chicago for part of their research and writing; others worked in their own offices elsewhere. Their training, backgrounds, and experience in the urban scene vary widely. Neither the Administrative Committee nor the Director, however, attempted to force conformity as to interpretation of facts or the expression of opinions and recommendations. Editorial forewords to the major divisions of this volume point out their relations to other parts of the Study, state why these subjects were thought to be significant, identify those who have written on them for URS, and emphasize any special difficulties in the inquiries undertaken.

Any sizable study carried forward in this way in a wide and ever changing field raises the question of what to do, if anything, to keep up-to-date the descriptive parts of those sections that are completed first. Several courses of action and the pros and cons of each are fairly obvious. URS decided to make additions or revisions of this kind only for those changes that were clearly of first-rate significance to the analysis or recommendations of their sections. Any other policy would have made for delay and additional expense. Some of the sections even if revised to the day copy went to the printers might be somewhat "behind the times" when made available to readers. Finally and most importantly, the Study has tried to choose subjects of more or less enduring concern. It is not a news service about redevelopment but rather, we hope, a contribution to an understanding of some of the major issues in urban life and growth as well as a partial guide to wise public and private policy on them.

COLEMAN WOODBURY
Director, URS

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ALLAN A. TWICHELL

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PART I

MEASURING THE QUALITY OF HOUSING IN PLANNING
FOR URBAN REDEVELOPMENT

BY
ALLAN A. TWICHELL

EDITOR'S FOREWORD

URBAN redevelopment throws a heavy responsibility on urban planning agencies as well as on the planning done in many of the operating departments of local governments. Several provisions of Title I of the Housing Act of 1949, under which financial aid may be given to most land acquisition and clearance projects, point up this responsibility, but they did not create it. It lies in the essential nature of the redevelopment process itself. It is no secret that most cities and nearly all metropolitan regions will have to step up both the quality and range of their planning if their redevelopment programs are to have a solid foundation on which to build.

Although surveys, fact-finding, and analysis are not, by any means, all of planning, they are an essential part of it. It is a truism to say that they provide one of the essential raw materials and that no amount of ingenuity and wisdom can make up for insufficient or inaccurate facts. Although housing surveys will not yield all of the facts that urban planners need, they can produce probably the most significant single set of data.

URS, therefore, offers this part of its work, "Measuring the Quality of Housing in Planning for Urban Redevelopment," as an aid to those official, civic, and private agencies that together are taking on the responsibility for planning and carrying through intelligent and comprehensive redevelopment programs. It has been written primarily for those individuals who will make most of the basic decisions in these programs. Although it should help those who actually carry on the survey work, it is not a manual on how to do surveys. It assumes a broad definition of redevelopment—broad enough to include not only clearance and rebuilding projects, but also rehabilitation and conservation measures where they are appropriate as well as developments on open land that are tied in with attacks on blight in built-up areas or that may reduce the virulence of the blighting process in the future. It also assumes that urban redevelopment is a long-term, continuing process that requires continuous planning. Finally, it does not deal with the equally significant and troublesome duty of estimating over-all housing needs and demand in urban localities.

Most of the work on this monograph was done in the latter part of 1949 and the early months of 1950. This accounts for the form of many of the references to the federal census of 1950. Because the time at which these sentences were written does not affect their substance or validity, they have not been changed in the later editing.

Although this monograph is primarily the work of Mr. Allan A. Twichell, it is, like other parts of URS' work, in many respects a team product. Other members of the staff, members of the Administrative Committee, and many officials and private individuals not directly connected with URS have contributed information, suggestions, and criticism. Many parts of the monograph reflect these contributions, but only in sections 1 and 3 of chapter i and sections 5 and 6 of chapter ii have they been largely responsible for content and organization.

Mr. Twichell's qualifications for writing on the subject of housing surveys need little explanation. For eleven years he was technical secretary of the American Public Health Association's Committee on the Hygiene of Housing. During that period he was in active charge of the Committee's work in formulating housing standards and developing methods for measuring compliance of housing conditions with those standards. He was subsequently Administrator of the Plan for Rezoning New York City, on the staff of Harrison, Ballard and Allen, housing and planning consultants. He worked for URS, however, as an individual staff member and not as a representative of the Committee or of Harrison, Ballard and Allen.

C. W.

CHAPTER I

FUNDAMENTALS IN EVALUATING URBAN AREAS

ON THE NATURE OF URBAN REDEVELOPMENT

ALTHOUGH concern over blight and deterioration in American cities goes back many, many years, the last decade or so has seen a notable increase in it. This increase has had two chief characteristics. More and more people in more and more walks of life have sensed that something is seriously wrong with most of our urban centers. Although much remains to be learned about the preconditions, causes, and results of the disease, our understanding of it has improved a little in recent years. Partly this has come about through study and research in universities and public and civic bodies. Probably considerably more has resulted from discussion and controversy over practical problems and proposed ways and means of dealing with them—the physical decay of many older residential and industrial areas; the removal of more and more taxpaying ability from the central cities of metropolitan regions; insufficient and bad housing for large sections of the population in the lower income brackets; congestion in all its forms; the concentration of some physical diseases and many mental and social maladjustments, such as juvenile delinquency, in the blighted districts; increasing difficulties of providing transit, health, recreational, and other public services through the present hodgepodge of separate and often antagonistic local government units in metropolitan districts, etc.

Without trying to trace the evolution of these problems and of the more commonly accepted ideas about them, it is easy to see that some of the earlier ideas and attitudes on them have come into disrepute. The old head-in-the-sand position—"there are no slums in our city"—is seldom assumed these days. Apparently very few people still believe that these difficulties will be remedied by the natural and normal operation of forces in the urban land market. Neither are these ills looked upon now as childhood diseases or growing pains of a young urban economy. The problems seem to be aggravating rather than curing themselves as our economy matures. Few, if any, responsible spokesmen of civic opinion now content themselves with clichés about slum dwellers making slums. Nowadays there is less open advocacy of re-

placing low-income families now in the blighted areas by other groups with more purchasing power and letting the displaced families shift for themselves. Although the problems of land assembly and valuation for redevelopment purposes are still recognized as of the first order, it has become clear that their solution alone will not amount to a cure.

Certainly it is progress to discard clichés and fallacious generalizations as well as to see the limitations of once accepted cure-alls. This progress on the intellectual side of urban redevelopment, however, probably has been outrun by the increasing seriousness of the disease and the difficulties that confront the doctors. Local officials and civic leaders do not need a list of these difficulties to realize how formidable they are. Very few, if any, of them are today guilty of a too easy optimism either about the problems that have led to the movement for urban redevelopment or about the obstacles that now confront it.

Fundamentally, therefore, the last decade has seen some genuine gains on the local front. Probably the most basic of these is the growing realization that urban redevelopment is more than a rather narrow, technical real estate operation of assembling sizeable tracts of land in built-up blighted areas, clearing off the present buildings, writing down the acquisition costs, and offering parcels on attractive terms to anyone who will put up new buildings. Put the other way around, many local leaders are now seeing that urban blight has many roots, takes many forms, affects many different kinds of areas from the most congested slums to dead or arrested subdivisions, and calls for a variety of forms of treatment. The indicated treatments run from the drastic surgery of clearance and rebuilding, through various forms of rehabilitation both of site plan and structures, to relatively mild conservation measures aimed at removing the first evidences of blight and protecting the desirable residential qualities of many older areas.¹ Various combinations of these remedies are now foreseen; some are being tried out; many

1. The terms "clearance," "rehabilitation," and "conservation" occur often in this analysis. The primary distinction is between "clearance" and "conservation." "Clearance" is the demolition or removal of all or nearly all of the buildings from an area—often accompanied by a new site layout and underground utilities. "Conservation" means measures to maintain or to improve the quality of residential districts without extensive clearance—repair and modernization of buildings, demolition of scattered buildings of poor quality, provision of more nearly adequate recreational and open space, rezoning, sometimes closing or dead-ending minor streets to prevent heavy traffic from going through the residential area, providing off-street parking facilities, more adequate school and other community facilities, etc. "Rehabilitation" is a fairly thorough conservation operation. The term usually implies considerable work on deteriorated and obsolete buildings. "Conservation" is sometimes, as above, distinguished from "rehabilitation." It then refers to less intensive and less thorough programs of action—often concentrated on neighborhood deficiencies rather than on buildings. Two of the best discussions of conservation are *Neighborhood Conservation—A Handbook for Citizen Groups* (Regional Association of Cleveland, 1943) and *Woodlawn—A Study in Community Conservation* (Chicago Plan Commission, 1946).

more probably will be discovered and tested in the not too distant future.

One corollary of these facts certainly deserves mention. The heaviest responsibilities for urban redevelopment lie in the official and civic organizations in the localities themselves. However important and desirable federal and state financial aid may be, they cannot substitute for local interest, planning, and action. Local responsibility, moreover, falls upon many agencies. It is not solely in the province of redevelopment authorities. Many other agencies of local government are directly concerned—planning commissions, health and building departments, park and school districts, departments for streets and transportation, welfare, and finance, housing authorities, zoning boards of appeal. In fact, every public agency that directly influences the pattern and quality of physical development in urban centers has some stake in, and some responsibility for, redevelopment programs. Mayors, city managers, and other top administrative officials, as well as members of local legislative bodies, are also directly concerned. So are leaders and members of civic and neighborhood organizations, labor unions, business, financial, and industrial groups. Even the unorganized citizen and housing consumer—our old friend the man-in-the-street—should not be overlooked in any such roll call. He will be affected, more or less directly, both as a citizen and taxpayer by what is done as well as by what may be left undone in redeveloping his city or town.

This is not to say that all of these agencies, organizations, and individuals have the same degree of concern and responsibility for redevelopment. Some of them clearly have to take the lead and shoulder most of the burden. Only a little thought, however, is needed to see that effective redevelopment is bound to be a joint product. In a very real sense, it is a local community enterprise.

Sketching thus roughly the framework of redevelopment, as it now begins to show itself in progressive urban communities in this country, is more than a warming-up operation or a mental setting-up exercise at the beginning of a section on housing surveys in redevelopment programs. One of the central themes of this essay is that good housing surveys are not packaged products that can be bought from the shelf. They ought to be designed and carried through to provide pertinent information, not only on background conditions, but more particularly on the exact character of the deficiencies that a redevelopment program should be designed (among other things) to correct. Detailed and sensitive information from surveys can make the difference between a nicely shaped and smoothly run program and a clumsy, bungling one. Responsible officials and leaders in all the major agencies and organizations in the program ought to have an interest in the survey methods employed.

They ought to be brought in early and have a chance to say what pertinent facts they now have and what more they would like to know in order to play their positions on the team. And some hard if limited experience suggests that early collaboration on survey content can be a long first step toward the effective linking-up of the powers and agencies, public and private, that have to work in harness if an urban center is to have a redevelopment *program* and not a collection of spasmodic and often abortive *projects*.

SURVEYS UNDER THE HOUSING ACT OF 1949

Partly as a result of the early local experience, analysis, and discussion just outlined, the federal Housing Act of 1949 recognizes blighted areas and slums in a new and fundamental sense as a threat both to the normal living of urban families and to the solvency of cities. It offers to implement a bold attack on these problems over a broad front and on a long-term basis: by helping to write down the costs of slum land that have stood as a barrier to redevelopment; by including aid on outlying, vacant land development and dead-land blight as well as on deteriorating parts of the central city; by providing incentives to private as well as to public housing; by stressing decent housing standards as the justification and touchstone of a program; and by requiring efforts toward preventing future blight as well as helping to cure mistakes of the past.

The Act brings powerful leverage to bear in support of progressive city planning, with initiative and responsibility as they should be in local hands. Cities that make full use of the Act's resources will find themselves moving from fragmentary programs of the past to a new approach that blends the work of planning, operating, and regulating bodies in comprehensive programs.

Not all redevelopment and housing activities will be carried out under the Act, but its provisions can be expected to set the pattern and dominate the landscape in the years ahead.

Important as they are, the basic provisions of the Act operate for only six years commencing in July, 1949. The financial aids offer only a start toward the job of rebuilding American cities. Further extension of these aids will depend partly on the effectiveness of local programs in the next few years as judged by popular and congressional opinion—both as to how much is accomplished and whether the jobs undertaken are, on the whole, the ones that most need doing.

No redevelopment or housing program can be more effective than the factual information on which it is built. Planning the program, measuring its progress toward the goals set, adapting it to changing needs or

opportunities depend first of all on information about the areas and people to be affected—enough information, reliable information, information so organized as to reveal the basic problems.

A primary responsibility of local officials is to judge whether information available from past surveys or proposed to be gathered in a new survey will be adequate for the uses expected of it. Surveys designed for a single purpose may fail to serve other purposes that become equally urgent under an integrated program; or multi-purpose surveys may lack the sharpness required for separate parts of the program. Adequacy in such respects is no mystical affair. It depends on definite principles and criteria embodied in the design and execution of survey procedures. With some knowledge of these controlling factors, the user of survey data will not expect too much from crude information or be satisfied with too little from refined information.

Under the redevelopment section of the Act, Title I, federal assistance may be given to local programs embracing any or all of the following types of projects:²

1. Redevelopment of residential slums or blighted areas for any locally approved use
2. Redevelopment of blighted commercial or industrial areas for residential use
3. Residential redevelopment of predominantly open land with blight such as that of the dead or arrested subdivision
4. Residential development of essentially open land needed for sound community growth

Loans and grants are available for the first three types of projects; loans only for the fourth. Both types of aid are new in the scheme of federal assistance to localities. The public housing program is extended by Title III, and Title I provides for writing down the cost of project sites by grants from the Title I program.

As the first or screening stage of a redevelopment program, the slums and blighted areas must be identified and evidence given of their substandardness or deterioration. Where data have not been compiled in previous studies of a city, this may be done from the housing census or other sources as discussed in chapter iii.

The second stage of a redevelopment program will include designation of the blighted areas or parts thereof selected for treatment in the initial program. Within this redevelopment plan, project plans will show the treatment proposed for each area, including cost analyses and demonstration that the proposal is feasible.

Redevelopment and project plans call for more refined information than the screening process. Not only must the need for slum clearance be documented but it must be shown whether housing or some other

2. Section 110(c).

use is the logical form of redevelopment. Here, of course, reasonably comprehensive land-use plans are essential. These call for more facts and analysis than can be provided by housing surveys. These surveys, however, can contribute toward sound, comprehensive planning. For example, poor location of a site with respect to employment opportunities or nearby offensive land uses may indicate its use for purposes other than housing; or an undersupply of industrial sites, recreation areas, or parking space may give such uses a claim to the clearance area. Where cleared sites are suitable for redevelopment with housing, it must be shown what groups could best be served in these locations, at what cost levels, and whether by public or private housing developments or some combination of them.

Studies beyond the screening stage may show that parts of a blighted area do not require clearance but warrant rehabilitation or conservation through enforcement of legal housing standards or voluntary activity. Although the Act does not recognize most conservation efforts as a type of project eligible for financial aid, conservation is clearly envisaged as an independent responsibility of the city. "In extending financial assistance . . ." under Title I, the federal administrator is required to ". . . give consideration to the extent to which appropriate local public bodies have undertaken positive programs . . . for preventing the spread or recurrence, in such community, of slums and blighted areas through the adoption, improvement and modernization of local codes and regulations relating to land use and adequate standards of health, sanitation, and safety for dwelling accommodations."³

Whatever requirements may be laid down under this provision, it is in a city's own interest to conserve such areas as can be brought up to a tolerable basic standard because the probable volume of slum clearance and reconstruction in the near future is vastly less than the need. Furthermore, a city that can show a superior program of slum prevention through law enforcement by its public health, building, or other departments can rightfully expect special consideration under the Act.

Determinations for the interacting programs sketched above require more information, more fully analyzed, than serves the purpose of preliminary screening. Later sections consider what makes a survey appropriate for the needs of integrated programs and illustrate how intensive surveys are being used in typical cities.

WHAT IS BLIGHT?

"Blight" and "blighted area" are terms that have come into rather common use in recent years. Although they entered the vocabularies of

3. Section 101(a).

planners, housers, realtors, mortgage lenders, and others before urban redevelopment, the usages of all three terms have grown almost hand in hand. Today, it is commonly said that the objective of redevelopment is to do away with urban blight. Although this statement is open to the serious criticism that urban redevelopment ought to produce cities that could be properly described in rather more glowing terms than by saying they have no blighted districts, certainly the elimination of blight is one of the principal aims of redevelopment programs. What, then, is blight as the term is used in this discussion?

Clearly, "blight" is a general or, possibly more accurately, a generic term. Almost never is it applied to a single building. It usually refers to an area or district of some size. It refers to no one characteristic or condition, nor even to any one set of conditions or characteristics that are always found in the same combination. Instead, it covers a fairly wide range of conditions and characteristics that from example to example are found in differing combinations, and with or without certain secondary features. Without trying to make this definition too fine, it would probably be agreed that the two basic characteristics of blighted areas are substandardness and either stagnation or deterioration.

Substandardness is basically a condition in which an area falls below certain officially adopted or generally accepted requirements of fitness for the purposes for which it is being used. Controversy still goes on as to what these minimum standards or requirements should be for the various kinds of use, how they should be measured, how they should be related to standards for new construction, etc. No one, however, can deny that, in more or less definite form, such specifications of fitness do exist and are being applied. Quite commonly in urban areas, substandardness can be identified in buildings—their design, equipment, structural soundness, repair, and maintenance; in land subdivision and layout—size and shape of lots, coverage, density, and sometimes even the amount and allocation of areas for new or expanding uses; in community facilities and services—water, sewer, schools, recreation, transportation, etc.; and in location—nearness to obnoxious uses, accessibility to other districts that a particular area serves or from which people and goods regularly go back and forth. When a district is markedly substandard in some or all of these respects, it is usually, but not always, blighted.

If, in addition to being substandard in various respects, an area is not improving, but either stagnating or actually deteriorating, it fully qualifies for the label "blighted." In the past, once districts have started downhill (i.e., have begun to fall below accepted minimum standards, either because of physical or economic change in the district itself or in its vicinity or because the standards have risen over a period of time),

most of them have continued downward and often at an increasing rate. Some exceptions, however, have occurred. For example, in the first few years after the New York Central tracks in New York City were run underground into the Grand Central Station, upper Park Avenue was certainly a substandard area. Removing the surface tracks, however, started a more or less automatic process of new building that certainly is not characteristic of blighted areas. Other examples of existing substandardness without stagnation or deterioration can be found, but they are relatively rare.

Without making distinctions for the sake of distinctions, it should be pointed out that blight should not be confused with some of the rule-of-thumb indicators of its existence. For example, for predominantly residential districts in times of reasonably full employment and normal vacancies, an often used index of blighted conditions is a decrease in population. In other words, when most people have reasonably high and steady or increasing incomes and some real choice of a place to live, many of them move out of the substandard, stagnating areas. It is easy, however, to find other conditions in which population decrease is not an indicator of blight. If unemployment is high and personal incomes are low and uncertain, many nonblighted districts may lose population. Some of the loss in these areas may actually show up as population gains in blighted districts. In times of acute housing shortage as at present, many blighted areas increase in population, often at an alarming rate. During the period of heavy immigration from Europe, many seacoast cities kept their blighted areas crammed with newly arrived immigrants. Internal migrations, particularly to rather small, rapidly growing cities, may have the same effect.

Often it is said that a blighted area is one that is an economic liability to the city or urban center of which it is a part. Properly qualified and understood, this statement probably is true. It opens up, however, a rather elusive set of ideas that so far have probably produced more confusion than understanding about urban affairs. It is also a statement that is difficult to apply to specific districts or areas.

The first difficulty comes in trying to measure economic liability. Quite commonly, this term seems to mean that any district that produces less in tax revenues than the costs of public services it receives is an economic liability. As a guide to or definition of blighted areas, this concept is open to criticism.

First, it deals with only one class of income and expense items. Without derogating the usefulness of analysis in these terms, it certainly is arguable that the comparison of income and expenditures necessary in a true economic analysis ought to take some account of items not directly measurable in dollars of municipal revenue and expenditure. How about the intangible, nonmonetary income of residents of an area

in the form of direct satisfactions they enjoy from living in it? How about the extra cash expenditures and human costs of inconvenience and frustration imposed on families that are forced to try to maintain a decent family life in areas that work against them at almost every turn? How about the secondary effects of congestion and poor location that make for undue loss of time and waste of energy in long journeys to work, high costs of trucking raw materials and manufactured products, etc.? So far, no one has developed even approximate methods for measuring these and other forms of income and costs in the true meaning of these terms. Until we can at least estimate these other items with some confidence, it is practically impossible to put together an income and expense statement that will show whether an area is an economic liability or not.

A second and equally troublesome aspect of this notion of economic liability is that the more careful studies of municipal income and expenditures in different kinds of urban areas show that nearly all residential areas receive governmental services costing more than the districts produce in revenue. This is true not only of blighted areas but also of most low- and middle-income residential districts that are not blighted by any reasonable standards of judgment. This dollar deficit, of course, is made up from taxes on a relatively few high-income residential areas and, more importantly, by revenues from commercial and some kinds of industrial districts. Does it follow, therefore, that all except these last three kinds of districts are economic liabilities to the community? Much of the value and taxpaying ability in the commercial and industrial districts is due in no small part to the work done and purchases made by families of middle and low incomes, the same families whose residential areas show an excess of expenditures over revenues.

Of course, it would be possible to establish certain norms on the relations of municipal revenues and expenditures for different types of residential areas. If this were done, it would be possible to say that some districts showed markedly greater deficits than the norm for their type. Perhaps this would justify the conclusion that they were, in some sense, economic liabilities. At best, however, this would be a rather tenuous line of argument and, in any event, we do not now have reliable facts for establishing the norms.

A final difficulty in the economic liability approach to blight is that, from its use to date, it is hard if not impossible to say whether those who use the term look upon alleged economic liability as an essential characteristic of blight, or as a common by-product of it, or maybe only as an indicator or index of its existence.

Our conclusion, therefore, is that, although the notion of economic liability is one that deserves much more analysis and is potentially use-

ful in studying various urban problems, it is not now in shape to be used in this discussion.

Two other aspects of current thinking about blight deserve brief notice.

Blighted areas have often been thought of as primarily residential. In this usage, "blighted area" is a broader term than "slum." In other words, a slum is a badly blighted residential district. It has become clear, however, that nonresidential areas may be blighted. Commercial and industrial districts—the two major types of nonresidential areas—certainly provide examples that meet the criteria of substandardness and stagnation or deterioration. It is fair to say that this broadening of the term has been accepted in many quarters. It is also true, however, that very little analytical work has been done on the measurement of commercial and industrial blight. They are mentioned in this volume, but only incidentally to its main purpose.

Originally also, blighted areas were thought of almost entirely as built-up areas. Probably this is still the prevailing current usage, but dead and arrested subdivision areas also qualify under the two main criteria that we have used. Here again, much more analysis and testing are in order. Some suggestions on this subject are made in the following pages, but it clearly deserves much more attention than we have been able to give it.

If, then, substandardness and stagnation or deterioration are the hallmarks of blighted areas, can they be measured objectively and accurately?

Although there is still plenty of room for argument about minimum standards for predominantly residential areas, it is now entirely possible to evaluate housing districts against defensible minimum requirements. Much of this monograph is an explanation and illustration of this process. Possibly the concepts of stagnation and deterioration are not now quite as clearly reduced to measurable elements, but as a practical matter they do not present any insuperable difficulties. They do, of course, imply comparisons of conditions at two or preferably more points in time. The kind of housing surveys presented in this monograph, if repeated at reasonable intervals, would produce the basic material for determining whether in fact any residential district were either stagnant or deteriorating. Again, however, as a practical matter in most communities, on-the-ground inspection, a review of recently issued building permits and public projects will provide a fair basis for saying whether or not substandard conditions are being removed or substantially ameliorated. Later on, this approximate method of determining stagnation or deterioration could be replaced by the more accurate process of simply repeating the basic housing survey, either on a

complete coverage or adequate sampling basis, and comparing the results over the lapsed period of time.

HOUSING STANDARDS: A CORNERSTONE OF POLICY

It has been said that "the maturity of a nation's housing program can be judged with fair accuracy by the regard which is paid to housing standards. First, the extent to which public policy in housing and related fields of planning is based on the fulfilment of decent contemporary standards; second, the degree to which producers of housing recognize their obligation to meet such standards; and finally, the extent to which the lay public knows that there are such things as housing standards, and demands or takes for granted that its housing shall meet them."⁴

The Housing Act of 1949 represents another step for the United States to a new level of maturity in this regard. Among its declared purposes is the provision of "a decent home and a suitable living environment for every American family." Implicit here are standards according to which decency and suitability can be judged.

New housing produced under the national program will of course be expected to comply with reasonable current standards. Standards, however, should not be regarded as applying only to housing of the future. It is equally important that good formulations of housing standards be embodied in surveys of slums and blighted areas. Only surveys that accurately measure compliance or noncompliance with modern standards will serve to classify these problem areas according to the treatment they require, whether clearance and rebuilding, rehabilitation, conservation of the present buildings and community facilities—or some combination of these major forms of treatment. By measuring the impact of substandardness on various economic or social groups, such surveys will supply an essential guide to the location and design of future housing and to the cost levels they must achieve. In revealing the characteristic housing defects of a community, such surveys further provide a realistic basis for modernizing local housing codes, stressing the special problems of the locality, and giving force to the latent powers for urban redevelopment in agencies such as the building and public health departments.

Standards of housing quality, in short, are the element that can synthesize many hitherto disparate interests and approaches to the problem of blight and slums. The merit of a housing survey is directly proportionate to the refinement of the standards it embodies and the number of these interests it can serve.

4. "National Conference on Family Life," (Washington, 1949). Unpublished report of Housing Section.

CHAPTER II

BLIGHTED AREA SURVEYS AND WHAT THEY TELL

FACTORS THAT GOVERN THE VALUE OF SURVEYS

SURVEYS of urban problem areas, like other machinery, should be designed to accomplish specified tasks. Both the cost and the ultimate usefulness of a survey are governed by choices made (whether consciously or not) at the time of designing the procedures or adopting a system developed by others. Survey methods are too often designed or adopted without recognizing possible alternatives, and limitations that might have been foreseen are not discovered until the work is too far advanced for change.

Typical of decisions that will control the efficiency and value of a survey are these: Is the study to serve the needs of only one agency or can it be made to serve the needs of several? Will an existing standard method suffice or must new procedures be devised? If a standard method is to be used, does it provide flexibility for dealing with special problems of the locality? Can the economical device of sampling be used or must all cases be enumerated? Must a new staff be recruited for the task or can it be done by personnel of an existing agency? Will the proposed scheme of tabulation and analysis bring out the meanings of the data collected? If an outside (state or federal) agency conducts the survey, will this limit local use of the findings?

The list could be greatly extended, and some of the points involved are fairly technical, warranting discussion only in a manual of procedures addressed to directors of surveys. But perhaps these questions will serve to indicate that surveys do not just happen, they are designed.

In some cases the advantages or disadvantages of one choice or another are self-evident. In other cases, however, there are possibilities or pitfalls too seldom recognized by those who buy surveys, use the results, and pay the bills. It is a major purpose of this and the following chapters to indicate such possibilities and pitfalls. Special attention will be given to advantages and limitations of the standard housing survey methods most widely used, but the observations may also be of value to those who work with locally devised procedures.

STANDARD HOUSING SURVEY METHODS

The term "standard housing survey method" is used here to mean a system of survey procedures that has been made uniformly available to

all American cities and has been used in enough of them to demonstrate its value as an instrument of local policy. Of the three such systems to be considered, the United States Census of Housing has been carried out for every community in the United States. Its findings are published as standard series of tables for localities, states, and the nation as a whole. The Real Property Survey technique and the American Public Health Association's method for measuring the quality of housing have been less widely used, but published procedures have made them available to all cities, and the results of their application in some cities are also available in printed form. These methods will be reviewed in the order of their development. The subject matter of each is summarized in Table 1.

REAL PROPERTY SURVEYS

The Real Property Survey technique was developed in 1935 by federal agencies for general use in local housing surveys as work relief projects. The method was built on experience gained in the previous year with a pilot technique of similar purpose.¹ As shown by Table 1, subject matter covered by the RPS is similar to that of the Housing Census. Comment on the RPS as a measure of housing conditions will therefore be combined with comment on the Census. Certain characteristics of the RPS, however, are worthy of special note.

In the late thirties the RPS was adapted to the needs of local housing authorities, then coming into activity, by the addition of a parallel Low Income Housing Area Survey. In this, a supplementary questionnaire was completed for each dwelling found substandard by the RPS, showing household composition, incomes and employment status of household members, and cost of utilities paid in addition to rent. This information was obtained to indicate the space needs and rent-paying abilities of families in the group that might be eligible for public housing.

Real Property Surveys gave America its first fairly comprehensive body of housing information and its first standard basis for comparing conditions from city to city. Perhaps more than any other factor they made it possible to enlist popular support for the emerging public housing program, and they buried the myth, "there are no slums in *my* city."

These were generally one-shot surveys, not repeated or kept up to

1. The 1934 method, known as the Real Property Inventory, was developed by the Department of Commerce in co-operation with the Civil Works Administration and the Federal Emergency Relief Administration. Its successor was produced by the Co-ordinating Committee of the Central Statistical Board, the Works Progress Administration and the Division of Economics and Statistics, Federal Housing Administration. RPI's were carried out in sixty-four cities; RPS's had been made in over three hundred additional cities by 1940, when the method was generally superseded by the Census of Housing.

date. It is unlikely that they will be repeated now in many cities, for the Census of Housing provides similar information without the local expense or administrative burden of the large staffs required for the RPS. The mimeographed procedures, moreover, are out of print.

TABLE 1
STANDARD HOUSING SURVEY METHODS:
SUMMARY COMPARISON OF CONTENTS

	Real Property Survey	Census of Housing 1940	APHA [*] Appraisal Method
Descriptive and financial items			
Dwelling			
Type of structure.....	X	X	X
Size of unit (number of rooms).....	X	†	X
Tenure.....	X	X	X
Rent or value.....	X	X	X
Mortgage status.....	X	X	
Household			
Size.....	X	X	X
Race.....	X	X	X
Income.....	*	§	X
Employment.....	*	§	
Indices of housing quality			
Dwelling			
Facilities			
Toilet.....	X	X	X
Water supply, bath.....	X	X	X
Laundry, wash basin.....			X
Piped hot water.....			X
Cooking, refrigeration.....	X	X	X
Heating: type of equipment.....	X	X	X
Heating: number of rooms heated.....			X
Electric lighting.....	X	‡	X
Natural light.....			X
Means of egress.....			X
Size of rooms.....			X
Closets.....			X
Maintenance			
Repair.....	X	X	X
Sanitary and safety hazards.....			X
Infestation.....			X
Occupancy			
Doubling of families.....	X		X
Room crowding.....	X	X	X
Area crowding.....			X
Physical environment			
Land crowding.....	†		X
Mixed land use.....			X
Traffic and railroad hazards or nuisance....			X
Natural hazards (flooding, swamps).....			X
Inadequate utilities.....			X
Inadequate community facilities.....			X

* Obtained with supplementary survey.

† Rough index.

‡ Not tabulated for areas less than entire city.

§ Enumerated in Census of Population; not given in housing tables.

|| Obtainable as supplementary item.

Despite the standard nature of the procedures, including recommended tabulation practice, the quality of local reports on Real Property Surveys varied considerably. Some of the best, despite being ten

years or more out of date, may still be found a mine of background information (for a city as a whole or for its critical areas) unmatched by any later studies of the locality.

CENSUS OF HOUSING: 1940, 1950

Detailed information on housing for the nation as a whole was first obtained by the federal Census in 1940. Schedule items closely resembling those of the Real Property Surveys were enumerated for every dwelling, urban and rural, and the findings were issued in uniform tables for states and localities over a period ending in 1945. The Housing Census added new merits to those of the RPS. It provided to each community, without direct cost, essential data on its housing conditions in a form to be compared with conditions elsewhere. These data have guided the policy of federal housing agencies, have formed the basis for many types of studies by localities and states, and have become the accepted benchmark for broad evaluation of American housing conditions. Repetition of the Census at ten-year intervals will permit analysis of essential trends in housing. Toward the end of an intercensal period, the data for any area of course lose value in proportion to housing changes since the Census date.

Subject matter.—Twenty-eight items on dwellings and their households were enumerated. These are shown in Table 2, grouped as direct indices of housing quality and as descriptive items—with indirect or no relation to housing quality. This grouping is not used in Census publications, but follows the practice of the APHA appraisal method.

Twenty descriptive items were enumerated, as well as eight indices of quality. Size and race of household were covered by the housing schedules; other characteristics of the residents were carried on separate population schedules, which limits the possibility of cross-tabulation with housing characteristics.

The quality items do not purport to measure all the aspects of housing significant for planning or development policy; they stand as measures of selected basic conditions and as indices of other conditions normally associated with them. The utility and limitations of key items will be discussed in later paragraphs.

Presentation of findings.—The findings were machine-tabulated in Washington and published in several standard and supplementary series of tables. Those dealing with geographic subdivisions of cities and thus available for the study of slums and blighted areas are as follows:

Series I: Data for Small Areas. This gives the findings on seven descriptive and three quality items, by wards, for cities of 10,000 or more inhabitants in 1940.

Series I Supplement: Block Statistics. A separate report for each of the 191 cities with 1930 population of 50,000 or more gives the findings on eight descriptive and

TABLE 2

CENSUS OF HOUSING:

(Items Enumerated; 1940 Tabulations for Subareas of Cities; Suggested 1950 Tabulations)

	ITEMS ENUMERATED		1940 TABULATIONS		SUGGESTED TABULATIONS	
	1940	1950	Blocks	Tracts	Blocks	Tracts
Descriptive and financial items						
Structure						
1. Count of structures	X	X	X	X	—	X
2. Structure type and size (number of units)	X	X	—	X	—	X
3. Conversion from other type.....	X	—	—	—	—	—
4. Exterior materials	X	—	—	—	—	—
5. Year built	X	S	X	X	—	—
6. Value of property (owner-occupied) . . .	X	X	—	—	—	X
7. Mortgage status (owner-occupied)	X	X	X	X	—	X
Dwelling unit						
8. Count of units	X	X	X	X	X	X
9. Size of units (number of rooms)	X	X	—	—	X	X
10. Tenure, vacancy.....	X	X	X	X	X	X
11. Rent or value.....	X	X	X	X	X	X
12. Furniture included in rent.....	X	X	—	—	—	X
13. Rent if unfurnished.....	X	X	—	—	—	—
14. Cost of utilities and fuel.....	X	X	—	X	—	X
15. Heating fuel (type).....	X	S*	—	X	—	—
16. Cooking fuel (type).....	X	S	—	—	—	—
Household						
17. Count of households	X	X	X	X	X	X
18. Color or race of head.....	X	X	X	X	X	X
19. Size of household (number of persons) . .	X	X	—	X	X	X
20. Ownership of radio (1950 includes tele- vision).....	X	S	—	X	—	—
Subtotal (including sample items)	20	18	8	13	7	13
Indices of housing quality						
Facilities						
21. Toilet	X	X	—	X	X	X
22. Water supply (1950 includes hot water)	X	X	—	X	X	X
23. Bath.....	X	X	X	X	X	X
24. Kitchen sink.....	—	S	—	—	—	X
25. Refrigeration.....	X	S	—	X	—	X
26. Heating equipment.....	X	S	—	X	—	X
27. Electric lighting.....	X	S	—	—	—	X
Maintenance						
28. Condition of repair.....	X	X	X	X	X	X
Occupancy						
29. Room crowding.....	X	X	X	X	X	X
Subtotal (including sample items)	8	9	3	7	5	9
Total (including sample items)	28	27	11	20	12	22

*S indicates 20 per cent sample; not available for block tabulations.

three quality items, for each block of the city. For the 60 cities with Census tracts, the same data are given by tracts.

Population and Housing Statistics for Census Tracts. A separate report in this supplementary series was issued for each of the tracted cities. Nine descriptive and seven quality items are given by tracts. In selected cities a further table gives conditions of dwellings occupied by nonwhite households. Population data by tracts are given, again with further detail for nonwhites in selected cities.

The content of block and tract tabulations is summarized in Table 2. Ward tables cover the same items as block tables, except for omission of year built in the former.²

2. All publications of the Census of Housing are listed in *Sixteenth Census of the United States: 1940; Housing: Index of Reports* (Washington: Government Printing Office, 1945).

Series II, III, and IV of the Housing Census publications, as well as other special bulletins deal with towns, cities, or counties as a whole; with metropolitan districts, states, the United States—or with rural housing.

Local users of the Census have generally been limited to the published data, although the Bureau of the Census offers to make special tabulations to meet the needs of a locality. These are at the user's expense and subject to the work load and convenience of the Bureau. Unavailability of the punch-cards for supplementary analyses is a price cities pay for a survey conducted under remote control. It inhibits full use of Census data for comprehensive local programs, and is one of the factors impelling cities to conduct independent surveys supplementary to the Census.

Value for study of blighted areas.—Findings of the Census have been valuable in shaping national housing policy, in portraying the relative seriousness of problems from city to city, and in giving the basis for those parts of broad market analyses that evaluate the present housing supply in relation to expected city growth and future needs. From the standpoint of measuring the problems of specific slum or blighted areas, however, the Census data have several basic limitations. These arise from the small number of quality items enumerated, from the absence of a rating scale or other cumulative expression of housing deficiencies, and from the selection of data for publication on small areas. Most of the limitations apply equally to results of the Real Property Survey technique.

These two survey methods do not secure enough information about the quality of dwellings to determine their degree of conformance with modern housing standards. Houses may be wholly free from the defects reported by these systems and yet be either unlivable or poor enough to involve problems of definite concern for public policy. Significant factors not covered include natural lighting, means of egress in case of fire, size of rooms, operability of plumbing, dampness, specific fire hazards, and rat infestation. Not only are such conditions of daily importance to the families housed; many of them lie within the corrective powers of enforcement agencies such as the public health, building, and fire departments. Where these conditions are unrevealed by housing surveys, there is little to jog enforcement programs out of the low metabolic rate that has characterized them in most cities.

Although the Census Bureau refrains from stating which of the census-reported deficiencies make housing substandard, it is common practice of Census users to designate as substandard those dwellings that lack private bath, are in need of major repair, or show more than 1.5 persons per room (the last designates substandardness for occupancy only and has no bearing on the physical quality of the dwelling). This

is a crude basis indeed for determining substandardness. It has been imposed by the fact that these are the only three of the quality items published for blocks—the normal unit of analysis for intensive studies of blighted areas.

Hand in hand with this determination of substandardness commonly goes the inference that every house substandard by either of the physical criteria is a house that needs demolition and replacement. The inference that these two criteria measure the need for reconstruction can be one of the most dangerous ideas in housing practice. It can, and by a wide margin, either underestimate or overestimate the size of the actual slum clearance job. As suggested above, some thoroughly bad housing will not be detected by these indices. On the other hand, some housing properly classed as substandard is within the range that can be restored to an acceptable minimum standard by imaginative rehabilitation programs, backed by vigorous enforcement of police power statutes.

The shakiness of these criteria is emphasized by the fact that the 1940 item on need of repair is highly subjective. Consequently, it is subject to wide differences in results at the hands of different enumerators. Although personal differences may be expected to cancel out more or less when figures are combined for an entire city or state, they have been found to produce severe distortions in the portrayal of smaller areas. Furthermore, the test of overcrowding is a brutal one. More than 1.5 persons per room means, for a four-room dwelling, that seven persons must occupy it before it shows up in the block statistics for crowding. By this standard (if, in fact, the word is appropriate here), occupancy by six persons—four sleeping in two bedrooms and two in the living room—is not overcrowding regardless of the size of the rooms and of the age and sex of the members of the family!

Nor do the Census and RPS evaluate the physical environment of dwellings. The best house may be essentially unfit to live in if lack of surrounding open space robs it of light and air; if nearby business, industry, or railroads create excessive smoke, noise, vibration, or odors; if children are forced to play in hazardous streets; or if the neighborhood lacks the normal transportation, school, and shopping facilities. Some of these defects can be remedied, and will be as a routine matter, in any redevelopment scheme or neighborhood plan worthy of the name. Others cannot be cured by planning and development measures within the neighborhood itself. Any judgment as to the long-term use of residential areas must take serious account of their present environmental factors. No survey method that omits them gives more than a partial evaluation of the slum clearance and redevelopment problem.

Meanings that might be read from the RPS and Census data are ob-

scured by the lack of a rating scale or other device for measuring the cumulation of defects in a dwelling or a group of dwellings. The results do not tell how many houses are how bad. The problem here can be simply illustrated. Let it be supposed that a survey includes four indices of quality, and that in a given group of dwellings 25 per cent are deficient for each index. This could mean any of several things. First, that one-quarter of the houses are deficient on all four items—100 per cent poor in terms of the indices—and the other three-quarters have no deficiency. Second, it could mean that one-quarter have deficiency A, another quarter deficiency B, and so on through the list—all houses being 25 per cent deficient. Third, it could mean any condition between these extremes.

Although quality can be reliably measured only through rating scales beyond the capacity of the Census procedures, a rough sort of measurement would result from tabulating simply the number of cases that have one deficiency, the number having two, and so on. This is being done in experimental pretests for the 1950 census, and it is the hope of the Census Bureau that future reports can include such tabulations for small areas of cities. If so, the value of census data will be greatly enhanced for use in redevelopment and allied programs.

Meanings that could be had from the Census data are further obscured by the choice of items to be tabulated for small areas. If it be true that local housing, redevelopment, and planning agencies constitute a major group of Census users—and it seems doubtful that any other group compares with them in the number and magnitude of programs that depend on Housing Census data—then it would seem reasonable to expect that tabulations of data for small areas of cities should be designed for maximum utility to these agencies. With this goal in mind, tabulations would be designed to carry as many of the quality indices as possible. As noted above, however, the block tables carry only three quality items while they find space for eight of the descriptive items. Of the latter, at least two seem of doubtful value. Age of dwellings (year built) has been incompletely reported in most areas, is of uncertain accuracy at best, and in some places has been found to have little correlation with other problems. As to the tabulation of mortgage status by blocks, it may be questioned whether the program of any agency needs this information by such small units of area.

Assuming that cost limitations preclude more elaborate block tables than those of 1940, the value of block tables for measuring housing quality could be substantially improved in 1950 publications by replacing this pair of items with the items on toilets and water supply.

One descriptive item whose importance seems to have been overlooked in Census tabulations is the size of dwelling units—a distribu-

tion by number of rooms per unit. This information is not given for any urban areas smaller than cities. It would seem worthy of tabulation either for blocks or tracts in 1950 because small size of units, particularly in older areas, is the surest indicator of conversion into light-house-keeping quarters. This has been occurring in great volume in many cities and is producing in many places a most serious new type of slum or near-slum condition.

Changes anticipated in 1950 Census.—Some of the limitations cited will be overcome if appropriations for the 1950 Census permit its execution according to the desires and present plans for the Census Bureau.

As noted above, it is hoped that tabulations at least for tracts and larger areas can include a rough equivalent of scaling—the tables showing how many dwellings are deficient for one, two, and more of the quality items. If this can be done, it will remove much of the burden of working with nonadditive data. Local determinations could be made, for instance, of a critical level which is deemed to imply the need for slum clearance—perhaps at two or three of the Census deficiencies. The published data will give the incidence of conditions beyond any chosen level, a result impossible to achieve with 1940 data. It is earnestly to be hoped that such tabulation will be possible. If the barrier to it should be insufficient congressional appropriations, local users of the Census (and their national professional societies) might do well to ask for supplementary funds for this purpose.

Change of the item on water supply to show the presence or absence of piped hot water (as compared with the recording of only cold water in the previous schedules) will notably increase the sensitivity of the findings, particularly in obsolescent areas above the slum-clearance level which showed no deficiency under the old item.

Increased costs have forced the decision to enumerate some items for a 20 per cent sample of dwellings only. The items so affected are shown in Table 2. Since this sample would be unreliable in many small blocks, such items will presumably not be tabulated for areas smaller than tracts or wards. This puts a premium on the fullest possible tabulation by blocks of those quality items which are to be enumerated for every dwelling. Conference with the staff of the Census Bureau has indicated their awareness of this problem and their intention of meeting it in so far as possible.

Quality findings in 1950 should benefit from the more closely defined item on state of repair despite the unfortunate term, "dilapidation," chosen for it. Instructions have been entirely recast to take advantage of past experience, the field staff has been more thoroughly instructed on the item, and it seems reasonable to expect more consistent results

from one area to another than with the previous item. Even as improved, however, the item is inadequate to measure the extent of significant disrepair, for it reports by a simple yes-no question—dilapidated or not dilapidated—a complicated series of conditions that defy such elementary pigeon-holing. Accurate reporting of repair demands a scale or multiple classifications that reflect the range from little or no deterioration to extreme deterioration, but such classification is deemed beyond the capacity of the Census procedures. In its absence, the user of Census data will have little notion as to what part of the range has actually gone into the dilapidated group. Should the 1950 results show strikingly more or less widespread dilapidation than the 1940 results showed need of major repair, it might mean that the conditions have changed, but it might equally well mean only that the new definitions have proved, in the minds of Census enumerators, more or less restrictive than the old ones.

With national housing and redevelopment legislation enacted almost a year before the Census enumeration date, a time lag in release of the new findings might force many cities to make independent surveys for their basic needs. It is therefore of great importance that the Census Bureau make special advance tabulations for cities with active redevelopment and housing programs.

AMERICAN PUBLIC HEALTH ASSOCIATION APPRAISAL METHOD

Since 1940 the American Public Health Association's Committee on the Hygiene of Housing has developed its Appraisal Method for Measuring the Quality of Housing. Its essential purposes are to provide a reliable measure of compliance with the full range of modern standards (as expressed in the same committee's *Basic Principles of Healthful Housing*); to measure this compliance in a manner that will meet the needs of various agencies concerned with housing; and by this means to foster a joint attack rather than separate attacks on related problems of housing, redevelopment, and city planning.

Being a more refined instrument than the Census or the RPS, the APHA method is intended for application chiefly to problem areas disclosed by those or other screening methods. It is designed for execution by staffs of local bodies, including the inspection personnel of health or building departments. Part of its sensitivity depends on access to all parts of a dwelling, denied to enumerators of the Census. Surveys with this technique are usually made as a co-operative undertaking of several official agencies.

The method has been used by official agencies in about thirty cities in the United States, ranging in size from Philadelphia to Battle Creek, and from Brookline to Los Angeles. Complete written instructions are

available for the method,³ but its use is recommended only when a survey director has received practical training in the procedures. This is being supplied without charge by the United States Public Health Service through field training stations.

The chief features that distinguish this technique from earlier survey methods are:

- a) A more complete series of quality indices for dwellings, giving sensitivity to conditions above the range of slums
- b) Evaluation of the physical neighborhood environment
- c) Use of a rating scale, with graded penalty scores for each deficiency to express the over-all quality of housing in a single index figure
- d) Designation of basic deficiencies, any one of which renders a dwelling substandard regardless of the total penalty score
- e) A meaningful plan of tabulation and analysis with flexibility for local needs

Each of these features will be briefly discussed.

Subject matter.—As shown in Table 1, (p. 18) the items on dwelling quality parallel those of the Census and RPS, but numerous others are added. The complete list is given in Figure 1 (p. 27).

Among the added items essential for measuring slum conditions are those on access (from street, rear yard, or alley), source of water supply, obstruction of daylight by neighboring structures, adequacy of stairs and fire escapes (with a companion item on dual egress from individual dwelling units), public hall lighting, rooms lacking installed heater, rooms lacking window, rooms of substandard area, index of toilet condition, a deterioration item which relieves the enumerator of most of the subjective judgments, a report on infestation, a sanitary index item which covers numerous sanitary and safety hazards, and three direct measures of crowding in addition to persons per room—the only measure in previous survey systems. Problem conditions above the worst slum level are revealed by small or scattered penalties for these items, or by secondary items such as lack of piped hot water or washing facilities (laundry tub and wash basin), lack of central heating, and habitable rooms lacking closets.

Environmental deficiencies are measured in terms of crowding of the land by buildings, intermixture of residential and nonresidential uses, specific nuisances produced by nonresidential uses, hazards and nuisances related to street traffic or nearby railroads, liability to flooding,

3. *An Appraisal Method for Measuring the Quality of Housing: A Yardstick for Health Officers, Housing Officials and Planners.* Part I: "Nature and Uses of the Method, 1945." Part II: "Appraisal of Dwelling Conditions, 1946." Part III: "Appraisal of Neighborhood Environment, 1950." New York: American Public Health Association.

HOUSING SURVEY

City SPECIMEN State _____

UNIT APPRAISAL FORM

☐ Rooming UnitSerial U 487

I. DESCRIPTION

STRUCTURE: Address 1238 So. 10th St.District No. 27 Block No. 16 Appr. Area No. 7Owner or Agent _____ Not Avail. ☐Number of Units. Dwelling 1 Rooming — Business —Stories 2 Wood ☒ Attached ☐ Toilets 1 Baths —UNIT: Floor 1st Part _____ Unit No. _____Rooms 4 Occupants 7 With Lodgers ☐ Nonwhite ☒Occupied by: Tenant ☒ Owner ☐ Bldg. Employee ☐ Vacant ☐Rent \$ 28.00 per mo. ☐ per wk. ☐ Incl. Furn. ☐ Incl. Heat ☐Monthly Income \$ N.R. Rent N.R. Insp. by L.S. Insp. Date 9/49

II. APPRAISAL

DEFICIENCY ITEM

A. FACILITIES

	Penalty Score Points	Basic Defic
1. STRUCTURE: Main Access	<u>6</u>	—
2. Water Supply (Source)	<u>—</u>	—
3. Sewer Connection	<u>—</u>	—
4. Daylight Obstruction	<u>2</u>	—
5. Stairs and Fire Escapes	<u>—</u>	—
6. Public Hall Lighting	<u>—</u>	—
7. UNIT: Location in Structure	<u>—</u>	—
8. Kitchen (or Special Rooming Unit) Facilities	<u>6</u>	—
9. Toilet: Location <u>2</u> Type <u>—</u> Sharing <u>—</u>	<u>2</u>	—
10. Bath: Location <u>20</u> Type <u>—</u> Sharing <u>—</u>	<u>20</u>	*✓
11. Water Supply (Location and Type)	<u>10</u>	✓
12. Washing Facilities	<u>1</u>	—
13. Dual Egress	<u>—</u>	—
14. Electric Lighting	<u>10</u>	✓
15. Central Heating	<u>3</u>	—
16. Rooms Lacking Installed Heater	<u>5</u>	—
17. Rooms Lacking Window	<u>10</u>	—
18. Rooms Lacking Closet	<u>10</u>	—
19. Rooms of Substandard Area	<u>10</u>	—
20. Combined Room Facilities (Items 16-19) <u>25</u>	<u>25</u>	—
w <u>—</u> x <u>—</u> y <u>—</u> z <u>—</u>	<u>—</u>	—
a. Subtotal: Facilities	<u>114</u>	—

B. MAINTENANCE

21. Toilet Condition Index	<u>7</u>	—
22. Deterioration Index: Struc <u>70</u> Unit <u>15</u>	<u>35</u>	*✓
23. Infestation Index: Struc <u>5</u> Unit <u>7</u>	<u>12</u>	—
24. Sanitary Index: Struc <u>—</u> Unit <u>10</u>	<u>10</u>	—
25. Basement Condition Index	<u>7</u>	—
w <u>—</u> x <u>—</u> y <u>—</u> z <u>—</u>	<u>—</u>	—
b. Subtotal: Maintenance	<u>71</u>	—

C. OCCUPANCY

26. Room Crowding: Persons per Room	<u>10</u>	✓
27. Room Crowding: Persons per Sleeping Room	<u>5</u>	—
28. Area Crowding: Sleeping Area per Person	<u>15</u>	✓
29. Area Crowding: Nonsleeping Area per Person	<u>20</u>	—
30. Doubling of Basic Families	<u>—</u>	—
w <u>—</u> x <u>—</u> y <u>—</u> z <u>—</u>	<u>—</u>	—
c. Subtotal: Occupancy	<u>50</u>	—

D. DWELLING TOTAL

225 6E. ENVIRONMENT TOTAL w — x — y — z —123 —

F. HOUSING TOTAL

358 —

Key to Sanitary Index (Item 24)

Yea: Red — Gs — Ore — Reported: Pl — Fe — Wpl — Wfd — Hh — Wh —Extreme: Red — Gs — Ore — Observed: Pl — Fe — Wpl — Wfd — Hh — Wh —

adequacy of utilities and streets, and proximity of the basic community facilities—elementary schools, play areas, parks, public transportation, and provision for daily shopping.

Provision is made for adding schedule items to deal with special problems of a given city.

Rating system.—Operation of the rating scale for dwellings is shown in Figure 1, where a penalty score of 235 points for the specimen dwelling reflects a serious slum condition.⁴ Although the theoretical limit of the scale is higher, individual scores are seldom found in excess of 300 penalty points, and average scores of 120 points or more are commonly used to designate slum areas.

Environmental deficiencies are similarly rated on a separate appraisal form—Figure 2 (p. 29). Each dwelling unit carries the environment score of the block and street frontage in which it lies. The environment score added to the dwelling score gives a housing total score. Standard tabulations give the distribution of total and subtotal scores as well as the incidence of the separate deficiencies.

The relative quality of different areas or types of housing is instantly seen by comparison of their median scores. The dwelling score, for instance, expresses the combined effect of thirty quality items—an effect it would be impossible to comprehend if expressed only by separate tabulations of nonadditive items.

Basic deficiencies.—As part of the rating scheme a series of major substandard conditions or basic deficiencies has been defined. These are conditions that have been widely recognized by official agencies as calling for a correction order or as justifying the removal of the affected family to other quarters if the condition is not or cannot be remedied in their present quarters. The specifications of basic deficiencies are:

a) Water supply outside the dwelling unit, or from a source disapproved by health authorities

b) Toilet shared with another dwelling unit, located outside the structure or of type disapproved by health authorities; or other aspect of sewage disposal similarly disapproved

c) No installed bath, or bath shared with another dwelling unit or outside structure

d) No dual means of egress from dwelling unit

e) No electric lighting in dwelling unit

f) Three-fourths or more rooms lacking installed heat (this standard applies to northern climates; it is modified to meet regional conditions and also contains adjustments for pipeless furnaces and other special types of heating systems)

4. The appraisal form shown in Figure 1 is not the schedule used for collection of data in the field, but a summary of this prepared by the office staff.

ITEM		PENALTY SCORE
A. LAND CROWDING		
1. Coverage by Structures	13	31
2. Residential Building Density	6	
3. Population Density	8	
4. Residential Yard Areas	4	
	<u>Subtotal A</u>	
B. NONRESIDENTIAL LAND USES		
5. Areal Incidence of Nonresidential Land Uses	10	46
*6. Linear Incidence of Nonresidential Land Uses	10	
*7. Specific Nonresidential Hazards and Nuisances	20	
*8. Hazards to Morals and the Public Peace	6	
9. Smoke Incidence	—	
	<u>Subtotal B</u>	
C. HAZARDS AND NUISANCES FROM TRANSPORTATION SYSTEM		
*10. Street Traffic	20	22
*11. Railroads and Switchyards	2	
12. Airports	—	
	<u>Subtotal C</u>	
D. HAZARDS AND NUISANCES FROM NATURAL CAUSES		
13. Surface Flooding	—	—
14. Swamps or Marshes	—	
15. Topography	—	
	<u>Subtotal D</u>	
E. INADEQUATE UTILITIES AND SANITATION		
*16. Sanitary Sewerage System	—	4
*17. Public Water Supply	—	
*18. Streets and Walks	4	
	<u>Subtotal E</u>	
F. INADEQUATE BASIC COMMUNITY FACILITIES		
*19. Elementary Public Schools	—	20
20. Public Playgrounds	8	
21. Public Playfields	4	
22. Other Public Parks	8	
23. Public Transportation	—	
24. Food Stores	—	
*Item scored separately for each block frontage.	<u>Subtotal F</u>	
TOTAL ENVIRONMENTAL SCORE		<u>123</u>

Fig. 2.—Rating of a slum environment: detail of environment score shown at bottom of Figure 1 (adapted from block appraisal form of APHA method)

- g) Outside window lacking in any habitable room of unit
- h) Deterioration (disrepair) of second or third class as measured by the penalty scale
- i) Occupancy of more than 1.5 persons per habitable room (this low standard was adopted for comparability with Census data, but the rating scale measures other degrees of crowding—see discussion on pages 21 to 22)
- j) Occupancy of sleeping rooms giving less than 40 square feet of sleeping area per person

These specifications, designed for legal enforcement, purposely ignore certain of the standards set forth in the *Basic Principles of Healthful Housing*. For example, there is no requirement here as to freedom from environmental hazards, and none for piped hot water in the dwelling—an essential of convenient housekeeping. These omissions are not due to the unimportance of such factors, but solely to the fact that housing regulations and court interpretations thereof remain at such a low level that a finding of substandardness based on these considerations would probably be thrown out by the majority of courts.

The presence of any one basic deficiency makes a dwelling substandard in an exact sense, but realism will commonly direct slum clearance into those areas characterized by an average of two, three, or more basic deficiencies, leaving the others as far as possible to the agencies of conservation. Here, as in the point scores, measurement supplies a discriminating basis for remedial policy.

Analysis and interpretation.—A common weakness of housing surveys has been that when the results are presented it is difficult to tell what they mean and what should be done about them. A system of non-additive, unscored items is likely to result in a bewildering array of tables, graphs, and maps that will not be understood by the nontechnical official or the layman. Under a scoring method, a small number of maps and charts will show both the relative quality and the specific problems of the housing studied. The fact that scores express complex relationships in a single figure makes it possible to consider broad matters of policy before proceeding to details.

Analysis proceeds from total scores as a measure of quality to item scores as a description of special problems. For instance, the first table or map in the usual analytic series will classify geographic areas into quality grades according to median total scores for dwellings and environment combined. This summarizes the entire survey on one sheet, and tells how good or poor over-all the areas are for families to live in. It does not, of course, indicate what remedies are needed. The answers to this question begin to appear with the first two breakdown maps or tables, one based on dwelling scores, the other on environmental scores.

The first of these reveals the areas that can be expected to need slum clearance or other extreme measures. The second indicates, among other things, those areas where poor environment may be expected to preclude redevelopment with housing. Thus an understanding of basic problems begins to emerge from the first three steps of an orderly analysis.

Further study in terms of subtotal and item scores will indicate the need for specific programs. Areas warranting slum clearance, for example, are commonly delimited by analysis of subtotal scores for dwelling facilities, as explained later in this section. Occupancy scores are omitted from such interpretation, as crowding of dwellings has no direct relation to their physical fitness.

Enforcement programs are shaped by study of the results on individual deficiencies. For instance, high penalties for inadequate means of egress will call the attention of the fire or building department to problems within its jurisdiction. Widespread infestation by rats has been taken in numerous cities as an equally clear mandate to the health department.

Quite as important as the study of geographic areas is the study of conditions that run with population groupings, types of dwellings, or economic status. The housing and families surveyed can be readily grouped according to such classifications, and here, too, the analysis proceeds in an orderly way from general to particular. Differential problems of racial groups, of multiple versus single dwellings, of housing in various rental levels, are clearly shown by tabulation of scores according to the appropriate descriptive items. This not only serves as a guide to closer study of significant problems, but acts as a stop to wasteful tabulation on meaningless breakdowns.

Efficient and flexible analysis is promoted by the processing of data onto statistical punch-cards, which was not generally true of the RPS, and by retention of the cards in the locality, which is not possible under the Census. It is thus not necessary to impose a cumbersome standard tabulation plan that seeks to anticipate just which of the thousands of possible cross-combinations of the data will be needed to answer the questions of policy in a given city. A minimum series of primary tabulations is specified, sufficient to reveal the basic problems by geographical areas and to assure comparability of results from one city to another. Beyond this, secondary tabulations are readily made for any combinations desired to answer the practical questions that arise in specific programs.

The humdrum business of having the punch-cards at home would deserve no mention were it not for the fact that inevitable remoteness of the Census punch-cards has led too many customers of survey systems

to suppose that no questions can be answered that are not answered in standard published tables. Once a city possesses the physical means for analyzing survey data in response to its particular needs—a factor, of course, by no means unique to the APHA method—survey information can be raised to a new level of meaning and usefulness, as will be shown by examples in chapter iv.

Determination of slum clearance areas.—Perhaps the most basic test of a survey method is whether it sharply delimits those areas where housing conditions call for clearance—and whether these determinations make sense to qualified local observers.

Experience in early surveys with the APHA method showed that dwellings with a facilities subtotal penalty score of 50 points or over will usually have such combinations of important defects as to make them essentially unlivable, and that these defects normally cannot be corrected on an economic basis. Dwellings with penalties of this magnitude will usually have several fundamental defects that cannot be remedied without expensive mechanical installations or major structural changes: provision of additional toilets and baths, with appropriate space, lighting, and inclosures; installation of central heating systems; provision of added stairs or fire escapes; enlargement of room sizes, and so on. Sometimes these corrections are physically practicable but would entail expense out of line with the general value of the buildings, putting the improved quarters beyond the reach of those who need them. Sometimes they could be made only by robbing the dwelling units of essential space in habitable rooms.

These observations led the Committee on the Hygiene of Housing to recommend that facilities scores of 50 points or over be taken (subject to further local testing) as a rough presumptive dividing line between dwellings that might be rehabilitated and those that could not. This does not imply that dwellings on the poor side of the dividing line are necessarily the worst type of slum, but it does mean that the burden of proof will lie with those who contend that these houses can be brought up to a decent standard. It follows that areas that show a median facilities score of 50 points or more may reasonably be classified as clearance areas, since they are predominantly made up of dwellings difficult or impossible to rehabilitate.

Many of the cities using the method have tested and verified this criterion. The usual practice has been to select at random a number of dwelling units with facilities scores of about 50 points—perhaps in the range from 45 to 60. The buildings containing these units have been examined by a team of building specialists and realtors to determine the cost and practicability of correcting the deficiencies. In every case known to the writer, the conclusion has been that for all practical pur-

poses the buildings in this scoring range are beyond restoration to a decent standard.⁵

Rehabilitation may be impossible not only because of inadequate facilities but also because of extensive disrepair and structural deterioration. Since this factor is measured by the deterioration index item of the APHA method, with a score that appears in the maintenance items, numerous cities have used the combined facilities and maintenance scores as the criterion for need of slum clearance. A common formula is to designate for first-priority clearance those areas with median scores of 80 points or more for facilities and maintenance combined, and for second priority those areas with 60 points or more. This scheme is further discussed in chapter iv, where the mapping of clearance areas is illustrated by Figure 3.

What users think.—During the preparation of this monograph the Urban Redevelopment Study informally canvassed six cities that have recently made substantial use of the APHA appraisal method in order to learn of typical users' satisfaction or dissatisfaction with the system. The inquiry was prompted by the relative newness of the method, the fact that few cities have published their findings with it, the question sometimes raised whether the system is more elaborate and costly than need be, and the recognition that the present writer's part in developing the method might prevent his judging it without bias.

The cities chosen were Atlanta, Battle Creek, Los Angeles, Minneapolis, Philadelphia, and St. Louis.⁶ Ranging in population from forty thousand to two million and lying in various regions of the United States, these cities are believed to represent a fair cross-section of experience with this technique.

In each city the official in charge of the APHA survey was asked by the director of URS to comment frankly on his results with an opinion of the method. No set questionnaire was used, but comparability of replies was sought by asking each respondent to discuss a series of lead-off questions: For what purpose had the technique been used? Had it produced adequate information for those purposes? Had the results

5. The criterion of the 50-point score must, however, be used with caution in one form of substandard housing: the building that has been converted into numerous light-housekeeping suites or furnished housekeeping rooms, as illustrated in Figure 4. Such scores may be incurred in this type of building by deficiencies that result from flagrant overoccupancy rather than from poor initial character of the structures. Typical here are the penalties for grossly overshared toilets and baths, inadequate means of egress for new units created on the upper floors, and makeshift kitchen facilities. Such defects may be curable by reducing the occupancy to something like its original density, and may not mean that the buildings must be demolished.

6. Omitted from the inquiry were numerous cities that had recently adopted the method and had not completed their studies with it. Omitted also were earlier users of the system, such as New Haven and Milwaukee, whose published reports have indicated successful results.

been found to strengthen official programs? Had the cost and other operating characteristics been satisfactory? Would the method be used again if the choice were to be repeated?

Four of the cities had adopted the method as a guide to the integration of several programs such as city planning, slum clearance and redevelopment, modernization of housing codes, and rehabilitation through enforcement of housing regulations. Two cities had begun with more limited goals (related primarily to redevelopment), but had used the results for other purposes as well. In four cities two or more official agencies had co-operated in sponsorship and conduct of the studies, and in five the public health department had actively participated.

All replies expressed satisfaction with the results achieved. Four users indicated without reservation that they had found the results trustworthy as a basis for evaluation of housing problems and for the framing of official policy and programs, in other words, that the information produced is of the kind their programs need and that the rating scale is locally regarded as an accurate measure of housing deficiencies. Two users, while sharing this confidence in the rating scale, suggested means of refining it or pointed out items of unscored, descriptive information that would strengthen the schedules for special purposes.

Five users considered that the cost and effort required to conduct this type of survey are reasonable for the purposes served.⁷ One, with work still in progress and final cost undetermined, reserved judgment on this point. Five found the method free from unusual problems of administration; one had been troubled by divided responsibility in a jointly sponsored study. Two users criticized some elements of the office procedures as published but had revised these to their own satisfaction.

All cities had taken advantage of the flexibility the method provides as to the subject matter of a survey. Some had added schedule items to cover special requirements of their ordinances or to supply detailed information desired by a sponsoring agency; others had dropped items of minor significance in the locality. This adaptability of a standard method to local needs was an important factor in the satisfaction expressed by these users.

A frequent reaction to the APHA method is to question whether all

7. For the cities furnishing comparable data the cost of surveys ranged from \$1.97 to \$2.84 per dwelling unit surveyed, including the prorated cost of the environmental survey. This compares with estimates in the APHA survey manuals (1945 price level assumed) of the order of \$2.00 per dwelling unit. The dwelling survey was found to be requiring from 8.2 to 11.2 man months per thousand dwelling units, the environmental survey from 0.5 to 2.8 man months per hundred blocks. Comparable figures in the APHA estimates are 8.4 and 1.5 man months. It is understood that 1949 costs of Census-type surveys as conducted by the Census Bureau and private consulting firms are of the order of \$2.00 per dwelling unit, without environmental surveys.

of the information produced is necessary for local programs, and whether a condensed appraisal would not serve the purpose equally well at substantially lower cost. These users were therefore asked whether they would welcome an abridged form of the dwelling survey procedures if this promised significant economy. (The question was limited to the dwelling appraisal because an abridged version of the environmental survey is available.)

Of the four who discussed this possibility, two were opposed to abridgment on the ground that all of the present information has been found essential by one or more of the agencies co-operating in an integrated program. The other two doubted that abridgment would give substantial economy, both pointing out that many field and office operations are little affected by the number of schedule items. These two, however, favored study of the possibilities of abridgment, feeling that even a slightly quicker or cheaper method might be advantageous when great speed is essential or when cost cannot be spread among a group of co-operating agencies.⁸

Aside from the fact that, in the judgment of these users, slum clearance needs and redevelopment possibilities are being measured better than by previous survey methods, the replies mentioned various specific ways in which an APHA survey had strengthened official programs—sometimes in a manner not anticipated by the sponsors. Some cities have obtained appropriations for additional planning or enforcement personnel because of needs revealed by the survey findings. Attention has been focused on the importance of controlling dwelling conversions. In one case the survey led to co-ordination of zoning and building regulations of the city and the surrounding townships as a means of controlling fringe developments—shown by the survey to contain the community's worst housing. In several cities the survey findings are being used to gain public support for new housing codes or the strengthening of old ones. Health officials reported that enforcement programs are being more sharply beamed at the special problems of each area, and that inspectors have improved the quality of their routine work because of the training received in these survey procedures.

Five users replied to the question: Would you use the APHA method again if you had the job to do over? One was undecided, feeling the answer might hinge on the possibility of broader sponsorship of a future study. In this city the survey had been made solely for purposes of the redevelopment program, without participation by the housing or enforcement agencies. The other four replies were in the affirmative. In three of these cities the question of future use is not hypothetical, for

8. The possibilities and problems of condensing the APHA system are discussed in the Appendix.

each has recently extended its APHA survey into new areas or has installed the method to serve as a continuous inventory of the slums and blighted sections of the city. In each of these cases a wheel-horse role is being played by the public health department—in some cities a recent addition to the housing and planning team but an important one. A point not to be overlooked by other members of the team is that health and building departments have permanent inspection staffs both fitted and potentially available for this basic task of keeping up to date a city's knowledge of its housing conditions and problems.

LOCAL HOUSING SURVEY METHODS

Prior to the Real Property Inventories of 1934, housing surveys were few and individualistic. Housing standards had not been clearly formulated. No general pattern of survey subject matter had emerged, and surveys tended to reflect the personal interests of those who planned them. In the absence of a national housing program, there was little demand for surveys that would compare the condition of one community with another or measure national housing needs. In such a climate it is logical that standards of survey workmanship tended to the low side, and that solid facts and analysis of typical conditions were often subordinated to lurid accounts and shocking photographs of extreme cases.

Among the local surveys developed before the Real Property Survey, however, were some that demonstrated a high level of competence and had a notable effect in their communities. Outstanding among these is the New York study conducted by Dr. Stephen Smith in 1864, covering the full range of housing conditions in the archaic tenements of the time, including numerous aspects of the environment. Not only were these structures and their sanitary conditions systematically appraised, but they were related by physicians to the appalling rates of disease and death in these warrens. The findings were directly responsible for creation of the city's Board of Health and for enactment of the first tenement house law in America.

In Chicago, a series of studies of blighted and slum areas, made over a period of some twenty-five years by staff members and graduate students of the School of Social Service Administration of the University of Chicago, produced much useful information. Although the survey schedule was changed somewhat during this period, many of the findings are directly comparable so that a picture is given of changes in basic conditions over periods of time. Begun at the request of Charles B. Ball, then chief sanitary inspector of Chicago, these surveys were continued over long years of general apathy and indifference but have been drawn upon by various agencies and groups in their intermittent efforts

toward improving these areas in one way or another. The story of this work and of its findings and results was published in 1936—Edith Abbott *et al.*, *The Tenements of Chicago—1908–1935*. (This book makes clear both the values and shortcomings of this kind of survey procedure.⁹)

Between 1934 and 1938 the Health Department of Memphis, Tennessee, under Graves and Fletcher and with co-operation of the United States Public Health Service, conducted a series of surveys to provide a basis for housing enforcement policy in slum areas of the city. Here the appraisal was based on compliance with a few rudimentary standards of a local ordinance. The distinctive feature of the scheme was a rating system with scores based on the degree of noncompliance. Even with simple data, this device permitted analyses revealing the impact of slums as no other survey had done in recent times.¹⁰ The findings were not only used by the department for guidance of its vigorous enforcement and conservation programs, but supplied much of the basis for the local slum clearance and public housing activities as well. It was this admirable applied research that led the American Public Health Association's committee to develop its appraisal method for use in any city.

Other communities have conducted studies of compliance with local housing regulations, in some cases with significant results. A good example is Baltimore, where inspection and enforcement are made effective through special housing courts, and selected areas of the city are successively being brought into conformance with minimum legal standards.

Disclosure of nonconformance with present legal standards, however, is not an adequate measure of the housing problems that face American cities. Official requirements for existing dwellings, in all but a few of the cities that have a legal standard, are incomplete, archaic, and often poorly defined. It has been well said that to enforce such requirements is merely to perpetuate confusion and compromise.

LAND-USE MAPS AND INVENTORIES

Systematic information as to the nature of land use in a community, covering nonresidential uses as well as housing, is a first essential of city-planning programs. Cities as a rule maintain such information in the form of maps showing a classification of land use. They may be generalized to show merely the predominant use in each block or they may

9. Chicago: University of Chicago Press, 1936.

10. L. M. Graves, M. D., and Alfred H. Fletcher, "Enforcement and Subsidy in the Control of Slums," in *Housing for Health* (Lancaster, Pa.: Science Press, 1941).

give the type of use for each land parcel. Simple maps may be based on field observation without other permanent record; detailed maps are often supported by schedules of information on the property and functions comprising each land use. A system of this kind is called a land-use survey or inventory. It may include tabulations of the schedule information.

FUNCTIONS: VALUE FOR BLIGHT STUDIES

Maps and inventories serve as the basis for interpreting land-use trends, revision of zoning regulations, selection of sites for public improvements, and various other uses. They do not usually give direct indices or ratings of housing quality, but their descriptive information may be of substantial help in studying slums and blighted areas. Physical data on dwelling structures (number of dwelling units, number of stories and type of construction, presence of business units or rooming houses, and similar items) will often supplement the Housing Census data as indicators of problem areas. Economic data, such as tax assessments, may save arduous transcription from original sources. Potential sources of nuisance and hazard can be identified from classifications of business and industrial establishments according to the service performed, goods produced, and materials handled. Maps at large scale will, among other things, permit the computation of land coverage by structures as a measure of environmental crowding. Where official maps are not made at large scale, the Sanborn insurance atlas will serve this purpose.

REAL PROPERTY SURVEYS AS LAND-USE INVENTORIES

The RPS technique, unlike the Housing Census, included an inventory of nonresidential land uses. The standard procedures, however, put major stress on the housing data, and the usual reports include little information on nonresidential uses beyond their number in a given area. Some, however, give considerable attention to nonresidential data and include maps or tables on land area in various types of use, coverage of land by structures, distribution of business uses by block frontage, and similar factors of value in the analysis of problem areas.

CHICAGO LAND USE SURVEY: A COMPREHENSIVE STUDY

Combining the functions of housing survey and land-use inventory, the Chicago Land Use Survey is probably unmatched by any study of its type for breadth of subject matter, completeness of publication, and continuing use in its community.¹¹ The study used essentially the RPS

11. Chicago Plan Commission, *Chicago Land Use Survey*. Vol. I, "Residential Chicago"; Vol. II, "Land Use in Chicago" (Chicago: The Commission, 1942).

schedule for dwelling information, adding a schedule of comparable detail for each business use. The technique was developed by the Chicago Plan Commission and other local agencies in co-operation with federal survey specialists and was carried out as a project of WPA.

The first volume of the published report gives text interpretation of the physical, economic, and social aspects of the city's housing problem, plus tabular data and an exhaustive series of maps of the findings. For each block of the city sixteen aspects of housing are presented in a series of separate maps, showing the factors in dwelling type, condition of repair, sanitary facilities, values and rental, mortgage encumbrance, tenure status, and occupancy conditions. Other maps plot the sections of the city that are above average in physical condition, rental, and percentage of single-family dwellings.

The second volume consists primarily of a pair of detail maps for each square mile of the city. One shows the land-use classification of each parcel of land; the other gives the statistical values in each block for the principal findings of the survey.

The very detail of data such as these, serving varied purposes of the planning technician, impedes the understanding of nonspecialists. With respect to housing data, the limitations of nonadditive, unscored information appear in full force. It is difficult or impossible to bear in mind the cumulative meaning of the various maps required to express the quality of housing. Translation of the findings into more compact form, with qualitative grading of areas, was required before the public could be asked to understand the results or support a program derived from them. This translation was accomplished, at least partially, in two stages.

In 1943 the Commission published its *Master Plan of Residential Land Use of Chicago*.¹² This report divided the built-up portions of the city into the following graded types of areas: (a) blighted areas, (b) near-blighted areas, (c) conservation areas, (d) stable areas, and (e) new growth areas.

It was suggested that "the work of reconstructing the first two types of areas should be accomplished within the first generation after the war. At the end of that period, the Conservation areas will be ready for rebuilding, the present Stable areas will have become the Conservation areas and the present New Growth areas will have become Stable areas. By the end of the second generation from now the Conservation areas of today should have been rebuilt, and the present Stable areas will then be first on the list for clearance as blighted. This time sequence for replanning and rebuilding envisages a city that will be continually rebuilding itself, weeding out the unfit and obsolete structures, and

12. The Chicago Plan Commission, Chicago, 1943.

keeping pace in its residential neighborhoods with the latest technological improvements and the best standards of modern design."¹³

This is one of the few cases in which data from an RPS or Census-type survey have been followed through to their long-range planning implications, expressed in broad terms with meaning for the layman. The crudeness of the underlying data, however, throws doubt on the soundness of such classifications even when considered as a broad preliminary screening of problem and nonproblem areas. For example, conservation areas were earmarked as such on the basis that a majority of their structures had been built between 1895 and 1914 and that average rentals were above \$25 per month, with a secondary provision that not over 10 per cent of structures showed need for major repair. The two basic criteria are descriptive, not qualitative, and have no direct bearing either on the fitness of housing to be preserved for a generation or on the problems of keeping it in productive use for such a period.

A classification such as Conservation Area, supported by text implying that these areas will do well enough until the poorer ones have been rebuilt, suggests that nothing much is wrong in such areas now, which is not demonstrated by the data. Furthermore, it promotes complacency on the part of the general public and official agencies. Evaluation of such areas in terms of moderately refined indices of quality might well show widespread need of measures to correct mild forms of substandardness and to check incipient blight. With enforcement programs mobilized in such areas it could be that the end of a generation would not find them all in need of the reconstruction assumed by the report.

The limitations of the Master Plan as a measure of housing quality were largely overcome in the second major application of the Land Use Survey data. In preparation for the city's present redevelopment program the Plan Commission added other information to the Land Use Survey. It processed the data so as to rate each block in the critical areas according to a score that reflects the combination of housing quality, land-use characteristics, and indices of social disorganization. The resulting report was issued in 1948 as *Ten Square Miles of Chicago—Basic Facts*.¹⁴ This second application of the Land Use Survey data is one of the more effective procedures devised for screening out slum-clearance areas, and will be further discussed in chapter iii.

UNSOLVED PROBLEMS IN MEASURING NONRESIDENTIAL BLIGHT

Thus far the discussion has been concerned with methods for measuring substandardness of residential or predominantly residential areas.

13. *Ibid.*, p. 67.

14. Chicago Plan Commission, *A Report to the Chicago Land Clearance Commission* (Chicago: The Commission, 1948).

Title I of the Housing Act of 1949, however, authorizes federal aid for development programs that include the acquisition and re-use of deteriorated or deteriorating areas that are predominantly commercial or industrial, if the re-use is to be predominantly residential. In recognizing this type of blight, the Act does not define deterioration or suggest a level of blight that will justify public intervention. Although some state enabling acts give closer definition of blight than the federal law, they do not specify the levels at which action shall be taken. Nor is it the function of the basic legislation to do so. Exact determinations of this kind are properly the job of planners and redevelopment specialists.

Planners, redevelopers, and others have talked for years of nonresidential blight as a threat to the solvency of cities. Their stress on it is partly responsible for the broad new powers conveyed by the current legislation. The fact is, however, that little has been done on the technical level to identify and define the elements that constitute nonresidential blight, to develop systematic means for observing and describing such blight, or to supply objective measures of its seriousness. With respect to substandard housing, as indicated in earlier pages, these tasks have been accomplished, but they are yet to be seriously undertaken with respect to nonresidential blight.

Acquisition of redevelopment sites in nonresidential blighted areas should be justified by objective description and measurement comparable with those developed for evaluating residential slums. The importance of this is underscored by the fact that some states require the designation of redevelopment areas by ordinance of the local legislative body. Few such bodies can be expected to declare industrial or commercial areas blighted on the basis of the personal judgments of planning or redevelopment staffs. The city fathers can get measurement and proof of residential slum conditions; they may be expected increasingly to demand measurement and proof of nonresidential blight.

Systematic evaluation of nonresidential blight would seem to call for the development of concepts and techniques more or less parallel to those employed in the study of blighted housing areas. Whether a standard method of blight appraisal can be developed suitable for general application in cities remains to be seen.

If we mean to cope with industrial and commercial slums, the first problem is to define them exactly and agree as to the values they threaten. What are the elements that comprise nonresidential blight? Why and at what levels of seriousness do they warrant governmental action? Is nonresidential blight to be identified in terms of declining property values? by declining volume of business done or goods produced? by changing land uses deemed to represent a downward trend? (if so, according to whose criteria of what is downward?), by func-

tional interference, including traffic congestion, of one use with another, or interference with potentially superior uses contemplated by a future plan? by the production of sanitary or safety hazards that threaten the livability of surrounding residence? These and perhaps other factors may enter into a definition of nonresidential blight.

How are land uses to be described and classified as a basis for evaluating blight or lack of it? Here too is lack of agreement. In recent years, several schemes of land-use classification have been published, but none has gained general acceptance. Nor do any of them provide, in the opinion of representative planners as recently expressed to URS, an adequate approach to studies of nonresidential blight.

What are to be the sources of information, and what skills are needed to obtain it? Will field observations and published data (which suffice for housing surveys) be enough, or is more elusive information needed? If so, will businessmen disclose it to an investigative staff?

What are to be the units of data collection and analysis? The block? The street frontage? The individual parcel or land use? What of sub-uses within a building? How are we to deal with the relative importance of the big use and the small one?

Can the information, once assembled and processed, be rated with consistent weights to produce an objective scale measurement of blight? If so, at what points on the scale is acquisition of the area for redevelopment justified? What is to be done in a rating process to deal with the single overwhelming nuisance or hazard that by itself warrants drastic action—analogueous to the basic deficiency in housing surveys?

Whether or not a standard method proves feasible in this field, the objective would be the classification of nonresidential areas with at least as much refinement as the following: (a) no evidence of blight; (b) evidence of blight, but not of a degree warranting inclusion of the area in a redevelopment program; (c) evidence of blight at a critical level, tending to justify inclusion of the area in a redevelopment program; (d) evidence of extreme blight, clearly justifying inclusion in a redevelopment program.

Noted above are some of the procedural questions that have had to be answered before systematic housing survey methods could be developed. The development of such methods has taken years of study and field experiment despite the fact that many factors in housing surveys are less complex than they appear to be in the field of nonresidential blight. It seems unlikely that adequate methods in this new field will be produced in a few months or as the result of scattered local studies. The problem would seem to warrant prompt and serious attention, and on a national scale. It should be of concern to the professional societies of planners, to universities with planning curricula and research

facilities, and to the federal agencies administering the Housing Act. Among these groups there should be some that will initiate and carry through the studies needed to produce reliable instruments for evaluation of nonresidential blight.

DEAD AND ARRESTED SUBDIVISIONS

The measurement of blighted conditions in subdivision areas is now in about the same position as it is for built-up, nonresidential areas. The existence of blighted subdivision areas is now quite generally recognized. In their more extreme forms, they are not difficult to recognize. To date, however, no one has come to grips with the technical problems of (a) defining closely the elements of this kind of blight; (b) stating clear and reasonably objective evidences of their existence; (c) judging their relative weights or importance in the blighted condition; and (d) developing a survey technique that will provide reliable results over a wide range of conditions.

Like the more highly developed housing survey methods, such as the APHA technique, ways and means of measuring and evaluating blighted subdivisions probably will evolve slowly. Although preliminary outlines can be made now, the job of devising and perfecting a survey method will call for a substantial amount of field work to test and improve the initial procedures. There seems no prospect for shortcuts around this process. The first results undoubtedly will be crude and in some ways unsatisfactory. Some methods may work tolerably well in some situations, but prove less useful in others. If the objective is kept clearly in mind, however, and the experience with housing surveys is drawn upon wherever it is applicable, continuous testing, modifying, and retesting may be able to develop a technique that will be as sensitive and reliable as the better housing surveys.

Without the facilities or time to undertake this job, URS can only propose an outline of possible characteristics and elements in subdivision blight and offer a few suggestions on the delicate job of developing practical survey methods from such basic analysis. Because most blighted subdivisions were intended primarily for residential use, only these will be considered here. As a starter, therefore, the possible elements in analyzing blighted subdivisions may be put down as:

1. Location of area

- a) Relation to established residential, commercial, and industrial districts—distance, travel time, and cost; relation to prevailing winds affecting existing or proposed districts that produce smoke, odors, or noise harmful to residential development
- b) Availability of mass transit facilities connecting the subdivision area with centers of employment, recreation, etc.

- c) Adequacy and condition of roads and streets making possible similar connection by auto or other means of private conveyance
2. Topography
 - a) Liability to flooding
 - b) Subsoil or other conditions making for difficulty in building—percentage of area affected
 - c) Surface grades or other conditions that would increase substantially costs of providing housing, streets, underground utilities
3. Existing layout
 - a) Characteristic size and area of lots—their suitability for proposed type of development
 - b) Amount, location, and condition of land dedicated or available for schools, playgrounds, parks, parking lots, and other open spaces
 - c) Suitability of the minor street system for the proposed form of development
 - d) Existence of buffer districts or areas between residential or shopping districts and any obnoxious uses either in the subdivision area itself or adjacent to it
4. Site improvements
 - a) Existing provisions, if any, for water, sanitary and storm sewers, paving, street lighting, electricity and gas for domestic uses, condition of existing facilities, adequacy for proposed development
 - b) If such essential utilities are not provided, their availability in the general area—any unusual physical or economic conditions that will hinder their extension to the subdivision being surveyed
5. Community facilities
 - a) Number, capacity, and condition of elementary and high schools, churches, shopping centers, clinics or hospitals, branch libraries, either in the subdivision area or readily accessible to it
 - b) The arrangement or placing of these facilities in the site plan—their accessibility to future residents of the area with safety and convenience
6. Tax delinquency (including special assessments)
 - a) Percentage of parcels and of total area delinquent
 - b) Distribution of delinquencies by years
 - c) Accumulated delinquencies and penalties as percentage of appraised or assessed values
7. Ownership
 - a) Distribution
 - b) Approximate percentage of clouded or questionable titles
 - c) Mortgages or land contracts outstanding or in default—percentage of parcels affected
8. Buildings
 - a) If the area is partially built up, the condition and age of the structures
 - b) Their distribution and its effect upon neighborhood qualities of any proposed development
 - c) If the area has more than a scattering of buildings, both housing and subdivision survey methods may have to be applied to assure fully useful information

It should be understood that this outline has been put down only for purposes of discussion and modification. Not all of the subpoints may be reducible to objective items on a rating scale. Clearly, some of

them should have greater weight than others. Some are chiefly indices of blight; others would help indicate the appropriateness of future residential development in the area and its character. Other items probably should be added for studies in many and perhaps in all areas.

Another early question in developing this technique is whether the scoring should be on a negative (penalty) scale as in the APHA housing method, or on a positive (credit) scale. The former, of course, measures deficiencies or weaknesses—the higher the point total, the worse the area. The latter would be just the reverse. Points would be given for good qualities or merits of the area—the higher the point total, the better the area. A penalty scale for subdivision areas would have the obvious merit of being based on the same rationale and employing essentially the same method as the best housing surveys developed so far. Although this would be a practical advantage of some importance in the many localities in which both housing and subdivision areas would be surveyed in planning for redevelopment programs, a positive scale should not be ruled out from the start. It might have advantages that would offset the practical one of similarity of approach to that of the housing technique. Another possibility, of course, would be a combined penalty-credit scale—certain items scored for deficiencies, others for positive qualities.

Another question that must be considered quite early in the development of a subdivision survey method is whether these areas have basic deficiencies in the sense in which this term is used in the APHA techniques—conditions any one of which make an area substandard for its purposes regardless of other conditions. Offhand, it would seem that such basic deficiencies in subdivisions for residential development do exist. For example, liability to flooding, unless correctable at reasonable cost, would seem to be such a basic deficiency. Other possibilities can also be seen from the list above.

Although experience in developing the APHA technique as well as its present form should be most useful in formulating a method for subdivision areas, other problems may well be encountered on which the housing survey methods will not apply. At least one example of this may be foreseen. Basically, the APHA-type technique measures housing quality in terms of essential standards or requirements for healthful housing. With certain exceptions as to size and composition of families, these standards or requirements apply to all urban housing regardless of where it is located in the community, in what types of structures it is found, who the occupants are, their income status, or other conditions. At least some of the qualities or deficiencies of subdivision areas, however, do depend, at least in part, upon the type of future development indicated for the area by the over-all city or metropolitan plan.

For example, topographic features that would blight an area for lower cost development with single-family, free standing housing might not be equally harmful to a proposed development of a few multi-story apartment buildings with a large proportion of the area in park or other open space. Again, lot sizes and shapes that would be substandard for a development of free standing houses might not be inappropriate, if other conditions were right, for a development predominantly of row or group houses. In advance of formulating and testing survey methods, it seems impossible to say whether these apparent differences between housing and subdivision measurement are common enough or important enough to warrant different rating scales for different future uses of subdivision areas or whether they could be adequately dealt with by variations within one basis rating system.

Just one more comment may be in order here. Even with the best of intentions and luck, it will be years before a subdivision survey technique can be brought to the stage of development now held by qualitative housing surveys of the APHA type. Practical developments in local redevelopment programs, however, emphasize the long-term importance of formulating a sensitive and comprehensive system of subdivision measurement.

During and immediately after the last war, relatively few redevelopment officials showed much interest in planning for projects in dead and arrested subdivision areas. They felt that their primary job was in the built-up blighted districts. Although many admitted that some subdivision areas would have to be dealt with eventually, they were quite sure that the major problems as well as public interest were focused in the older, built-up areas. Even after Title I of the federal Housing Act of 1949 authorized aid to projects for residential development in blighted subdivisions, little change could be noted in this prevailing attitude.

More recently, however, a change has taken place. More and more local programs are taking in blighted subdivision projects and giving them a fairly high priority in time. The rigors of the housing shortage and the consequent difficulties in taking care of displaced families are among the considerations that have caused this change of emphasis. In addition, of course, further study and planning by local officials have played some part. Whatever the influences at work, the blighted subdivision has become a practically important problem in many local redevelopment programs and considerable evidence points to a continuation of this trend.

No one should conclude that no dead subdivisions can be safely included in local programs until a reliable technique for surveying them has been perfected or at least well developed. Many desirable and even necessary housing projects were planned and built while housing

surveys were still in the early stages of their evolution. Many urban centers, including most metropolitan regions, have dead subdivision areas that are so clearly appropriate for future housing development and are also so badly blighted that a start could safely be made with them now. Action in other areas, more marginal in character, probably could await further development of survey techniques. Whatever the logical priority, we can expect that pioneer projects for redeveloping blighted subdivision areas will go ahead more or less hand in hand with the formulating and testing of survey methods.

CHAPTER III

SCREENING SURVEYS FOR BROAD POLICY

THE ROLE OF SCREENING STUDIES

SURVEY as parts of planning for redevelopment and housing programs may be divided into screening and intensive studies. The latter are discussed in the next chapter.

The term "screening survey" is commonly used to mean a city-wide study that delimits or screens out the blighted or problem areas and measures in a preliminary way the need for clearance and rehousing. Typical of this operation are analyses made locally of the Housing Census bulletins in which the tract or block data are processed to reveal the location of predominantly substandard housing, the number of substandard dwellings, and the number of families deemed to need rehousing.

For the purpose of this discussion, a screening survey may be defined as one that roughly outlines the problem areas, suggests the nature and magnitude of problems to be anticipated there, and helps in the broad shaping of public policy; but which lacks the detail or accuracy needed as a guide to definitive programs.

Either of two limitations may restrict a survey to the role of screening. The study may cover only gross measures of the problems under consideration and thus be substantively incapable of supporting refined determinations. This is the limitation of Housing Census data discussed in the previous chapter. Or a method producing sensitive measurement may be carried out with a low ratio of sampling which, because of the sampling error, precludes analysis of the results by units as small as the city block. This aspect of sampling error is discussed in chapter v.

HOUSING CENSUS DATA

Most screening studies of recent years have used the 1940 Census indices of housing quality. Tract and block data have been plotted in various ways to identify substandard areas, sometimes with local information added to give a composite index of blight.

The chief purpose has usually been to document the need for slum clearance and low-rent public housing, and much emphasis has been put on block-by-block determination of substandard areas for clear-

ance. The reliability of such studies has been limited by the fact that 1940 Census block bulletins publish only three of the eight indices of quality (Table 2, p. 20). When the item on crowding is dropped as having no bearing on the physical fitness of dwellings, only two indices are left, the proportion of units lacking installed bath and those in need of major repair. These are, as previously indicated, a slender reed to support even approximate determination of substandard areas.

In larger cities the screening has often been done with data for tracts instead of blocks. Advantage can be taken of the fact that seven quality items are tabulated for tracts. This gives a stronger basis for designating substandard areas and for showing a range of quality above the bedrock slums than where block data are used.

The tract is, of course, a crude unit for analysis of this kind. Percentages of deficiency or other figures for a tract as a whole may conceal important differences in various parts of the tract. Nevertheless, the map patterns produced by tract analysis have repeatedly been found to be an adequate guide to the areas where the closer methods of intensive surveys should be concentrated:

SCORING WITH CENSUS DATA

Various schemes have been tried to combine the quality items of the Census into a single result, that is, to provide the equivalent of a score that summarizes findings in a single map or table.

One method is to show the incidence of each deficiency on a transparent base map, superimpose the maps, and let the critical areas be determined by the coincidence of deficiencies. Although this device may attribute equal weight to deficiencies of unequal importance, its clarifying value is probably greater than the distortions produced.

Another approach is the rating scale itself with penalty scores assigned to blocks or tracts according to the percentage occurrence of each deficiency. A scheme of this type, recently published after extended research by the Baltimore Housing Authority staff, deserves special comment.¹

The purpose in this case was to develop a rating formula which, if applied to Census data, would give each block a quality score proportionate to the score that a block would receive if appraised by the APHA method. In selected blocks of three cities using the APHA method, comparison was made between the APHA findings and those of the Housing Census. Rating formulas were applied to the Census data, the resulting scores were compared with those of the APHA scale

1. Philip Darling, "A Short-cut Method for Evaluating Housing Quality," *Land Economics*, XXV (May, 1949), 184-92.

for the same blocks, and the scheme was revised until it consistently produced scores proportionate to those of the APHA scale. The formula was then applied to Census data for the poorer quality areas of Baltimore. The resulting classification was considered to be consistent with the classification that would have resulted by applying the APHA scale. In publishing the results, it was suggested that the formula can be applied to cities generally.

The formula is:

$$\text{Penalty Score} = \frac{150 \sqrt[3]{C}}{R} \text{ where}$$

C is the percentage of dwelling units needing major repair plus three times the percentage lacking bath

R is the average monthly rent per unit; unadjusted for blocks with 100 per cent white occupancy, but reduced by 40 per cent for 100 per cent of nonwhite occupancy or proportionately for lesser degrees thereof

The formula says in effect that if lack of bath and need of repair are not a full measure of housing quality this will be adjusted by the interacting effect of rent and nonwhite occupancy. The dependability of this effect can be judged in the light of four hypothetical examples.

Let it be supposed that in each of four blocks 50 per cent of the units lack private bath and 50 per cent are reported in need of major repair. The blocks, however, differ in rent and occupancy. This difference and the resulting penalty scores are shown in the following table.

TABLE 3
USE OF DARLING FORMULA FOR DETERMINING
PENALTY SCORES IN FOUR HYPOTHETICAL CASES

FORMULA AND SCORE	AVERAGE RENT: \$15		AVERAGE RENT: \$30	
	100 per cent Nonwhite	0 per cent Nonwhite	100 per cent Nonwhite	0 per cent Nonwhite
$\frac{150\sqrt[3]{C}}{R}$	880	880	880	880
	9	15	18	30
Penalty Score: Points	98	59	49	29

The block scoring 29 points under this formula would be classified with nonproblem areas, whereas the block scoring 98 points would fall with those deemed to warrant slum clearance. Physical quality of the blocks, according to the indices given, is identical; the only differences are in rents and race of occupants.

Although this is a severe test of the formula, it seems a fair one. Dwellings of the same quality may not occur widely at these two rent levels in a single city, but what assurance is there that they will not in different cities? It is, after all, the purpose of the Census or any other

survey to determine the quality of housing as an independent factor so that quality can be studied in relation to descriptive factors such as rent and race of occupants. It may be doubted whether this formula of housing quality, depending so heavily on descriptive factors, is reliable for extension into cities generally.

CURRENT SAMPLING WITH CENSUS-TYPE SCHEDULES

As important changes in housing conditions are known to have occurred since 1940, the Census Bureau and the Public Housing Administration have co-operated in making an advance version of the 1950 Housing Census schedule available for use in cities that seek to qualify for public funds under the new Act. Sampling surveys with this schedule have been made both by personnel of official agencies and by private firms of survey specialists. They not only bring up to date the Census measurement of housing needs but also incorporate the improvements discussed in the previous chapter, including tabulations by number of deficiencies as a rough equivalent of quality scores. In a city that has not identified its slums and blighted areas, a survey of this type conducted jointly by the housing and redevelopment authorities could serve the screening purposes of both.

COMPOSITE INDICES OF BLIGHT

Another method of screening combines housing items of the Census with other information from local sources. The added items, covering social, economic, or land-use factors, are intended to give a broader base for determination of blighted areas than housing data alone.

This approach was developed in connection with early studies looking toward local redevelopment programs. Table 4 shows the composite indices used in three such schemes. (Since Baltimore and Milwaukee used similar data, these cities are shown in the same column.)

Studies of this type are made by mapping each factor separately by blocks or Census tracts. In the Baltimore-Milwaukee scheme, blighted areas were considered to exist where more than a specified number of the factors exceeded a certain critical value. In Chicago, a penalty score was applied to each block for each factor, and the total of these scores gave an over-all rating for the block.

The notable innovation of these schemes is the attempt to indicate excessive social costs in blighted areas through items on health, family disorganization, and governmental service loads. Such items may give a better delineation of problem areas than Census data alone, but a word of caution is in order. The items found useful in one city may be

unavailable in another, but even if available their value may be impaired by considerations not apparent at first glance. Impairments may arise from such facts as that the data do not cover a typical period for the phenomenon involved; that definitions and methods of reporting have changed during the period covered; or that official records must be supplemented by those of private bodies for full coverage of the problem under study. The net of this is that he who uses social indices to supplement housing data should make sure that each index will pass muster with specialists in the field of that index.

TABLE 4
COMPOSITE INDICES OF BLIGHT: FACTORS USED IN REPRESENTATIVE STUDIES

	Baltimore* Milwaukee†	Norfolk‡	Chicago§
Social cost, incidence of			
Tuberculosis	X	X	X
Juvenile delinquency	X	—	X
Public relief	X	—	—
Arrests, by residence of offender	—	X	—
Fire departments calls	—	X	—
Housing characteristics			
Rent or property value	X	X	X
Age of structure	X	X	X
Type of construction	—	—	X
Lack of bath or need of major repair	X	X	X
Overcrowding of dwellings	X	—	X
Land use and physical environment			
Density of dwellings or population	X	X	—
Land coverage by structures	—	—	X
Mixed uses and nuisance	—	—	X
Traffic and railroad hazards	—	—	X
Inadequate parks and schools	—	—	X
Layout of blocks, streets, and parks	—	—	X
Presence of vacant land	—	—	X

* *Redevelopment of Blighted Residential Areas in Baltimore*, Baltimore Commission on City Plan, 1945.

† *Evidences of Blight in the City of Milwaukee*, by *Census Tracts*, Milwaukee Board of Public Land Commissioners, 1946.

‡ *Redevelopment and Housing Program, Norfolk, Virginia*, Norfolk Redevelopment and Housing Authority, 1949.

§ *Ten Square Miles of Chicago—Basic Facts*, Chicago Plan Commission, 1948.

It is equally important to ask whether the supplementary factors are such as will tend to be improved by the contemplated redevelopment and housing programs. If not, their value among composite indices is dubious.

The Chicago survey cited in Table 4 goes beyond the others not only in the use of scores to measure problem areas, but also in the subject matter underlying these scores. Problems of land use or physical environment are reflected by several indices lacking in the other schemes. In both these respects, the Chicago survey represents a middle ground between the rough determinations of the Census and the refined ones of the APHA method. Although the Chicago measures of housing qual-

ity are nearly as limited as those of the Census, there can be no doubt that this scheme provides a sharper delineation of problem areas than any other published screening method.

Unfortunately for the use of this sound scheme in other cities, it depends to a considerable degree on the availability of data from Chicago's thorough land-use survey previously described. Few other cities have background information of comparable scope or have maintained it in form for current use.

AN APHA SCREENING STUDY—PLUS

Many regard the APHA appraisal method solely as a tool for intensive studies to be applied only with enumeration of every dwelling or at so high a ratio of sampling as to make the cost prohibitive for screening purposes. The tendency to use the method intensively is encouraged by the fact that enforcement agencies usually co-operate in its execution. Enforcement agencies as a rule want information on every dwelling, not on a sample.

It should be stressed, therefore, that the APHA method is equally suitable for screening or limited-purpose studies on the basis of sampling. Some cities have begun their surveys with thin sampling in order to provide a quick preliminary screening and have followed with a re-survey to cover each dwelling in areas that show special importance for programs of slum clearance, redevelopment, or law enforcement. This practice has the advantage of fully comparable data for all areas surveyed, whether by screening or by intensive high ratio sampling.

A good example of screening with this method is the New Haven survey of 1944, made by the housing authority and intended primarily to measure, in part, the need for postwar public housing.² Here the problem areas of the city were broadly identified by analysis of Census tract data. These areas were then surveyed with the abridged environmental appraisal and with the dwelling appraisal based on a sample of one dwelling unit in seven. This sampling ratio limited the areal analysis to groups of blocks rather than individual blocks, but such an analysis was found quite adequate for the purposes of the study.

Several results were produced that would be impossible with screening by the published Census data. The distribution of substandard housing was revealed not only by geographic areas but by levels of rent and types of dwellings. Distinction was made between kinds of substandardness warranting slum clearance and those calling for correction by law enforcement, and the corresponding areas were mapped. Clear-

2. This study is more fully described in Part I of the APHA survey procedures, cited in chapter ii, n. 3, p. 26.

ance areas unsuitable for redevelopment with housing because of poor physical environment were revealed. The survey showed the proportion of families in crowded dwellings together with the sizes of such families, information useful as a guide to space design in future housing projects. Discriminatory rents in Negro housing were disclosed through cross-tabulation of housing quality scores by rent for white and non-white families. Certain serious deficiencies were shown to be widespread but not in violation of present legal standards; light was thus thrown on the need for closing loopholes in housing regulations. Obsolescent areas above the substandard level were delimited, the nature of their deficiencies shown, and specific measures suggested to arrest the spread of blight in these neighborhoods.

Some of these findings depended on specific items carried in this but not in other survey methods; some depended on the scores as a measure of quality. Still others were possible merely because the data had been processed onto punch-cards retained in the city so that findings could be studied in special combinations as new questions of policy arose.

Despite the wide range of its results, this study of the critical areas in a city of about 175,000 persons was made at the cost of about \$4,000. Doubling this for subsequent inflation of survey costs, the figure would still be comparable to the cost of more limited surveys now being conducted by various cities for preliminary phases of their redevelopment and housing programs.

CHAPTER IV

INTENSIVE STUDIES TO GUIDE SPECIFIC ACTION

INFORMATION NEEDED FOR CO-ORDINATED PROGRAMS

AT THIS point, a recapitulation of the main line of argument of this section may be in order as preparation for the more detailed materials in this and the last chapter.

The Housing Act of 1949 clearly contemplates closer local integration than in the past of public and private housing efforts, of rehousing and other forms of redevelopment, and of clearing slums and conserving what is salvable. Housing surveys will be expected to answer more numerous and more complex questions than arose in earlier and fragmentary programs.

First, as to areas, survey data will be called upon to guide the making of policy over the full range from extreme slums to mildly or only potentially blighted neighborhoods. They must be able to distinguish accurately the mediocre area from the genuinely poor one; to indicate which areas need slum clearance and the relative urgency of this in each; to help indicate what areas, once cleared of housing, should not be used again for residence because of poor environment. They must show what is needed in law enforcement or voluntary rehabilitation in blighted areas above the level of slum clearance.

Second, as to people, survey data must show what kinds of families live under what kinds of substandardness and who would be directly affected by slum clearance or other contemplated programs. For instance, are those who live in light-housekeeping units normal families with children who need real dwelling units instead of one or two rooms? Or, what kinds of families live in the areas to be cleared? What space do they need in rehousing? What can they afford to pay for it?

Third, as to dwellings, survey data must permit study of deficiencies that characterize different types of structures, accommodations at various rent levels or other groupings of the houses. It should be possible to study separately any type of dwelling believed to harbor special problems such as rear-yard houses, commercial rooming houses, and multi-family dwellings for these may differ greatly as to deficiencies and possibilities of correction under the police power. It should be possible to judge whether facilities provided are in line with rentals

charged; if not, there may be grounds for special enforcement of the basic legal requirements.

Some of these and similar questions require no more than thoughtful analysis of data supplied by the older housing survey methods. Others, however, require more precise information than has generally been collected, together with the rating of housing conditions through scores or a similar device.

THE HOUSING CENSUS AND CENSUS-TYPE SURVEYS

Since the Housing Census is the only body of housing data available for all cities in comparable form, it has been used widely by public housing authorities, both national and local, as well as by some other agencies and individuals. Screening out problem areas has been followed by more intensive study of those areas, both through supplementary tabulations of the Census data and through interim surveys using a Census-type schedule and obtaining detailed information on family composition, income, and other items determining eligibility for public or other types of housing. Cities seeking aid under Title III of the new Act have been encouraged to make surveys of this type in advance of publication of the 1950 Census, using either official personnel or the facilities of private survey specialists.

Where it is decided to use the Census pattern of information for intensive surveys, three steps should help to minimize the limitations of these data. One is to make sure that the schedules used embody all improvements recently developed by the Census Bureau for inclusion in the 1950 Census, such as the redefinition of the item on state of repair and addition of minor items that improve sensitivity above the bedrock slums. A second is to see that the scheme of tabulation includes tables showing distributions of dwellings by the number of deficiencies. As has been pointed out before, this simple substitute for scoring will give a considerably sharper picture of the quality range within and above the slum areas, and hence a better guide to clearance and conservation policy, than the old Census practice of discrete tabulations for individual deficiencies. A last step is to make sure that punch-cards of the survey data will continue to be available—preferably in the locality itself—for special tabulations as need for them may arise in one local program or another.

Despite the limitations of Census-type data as a measure of housing quality, they can be made to answer many questions beyond those treated in the Census bulletins for blocks and tracts. For instance, cross-tabulation of the quality index (number of deficiencies per dwelling unit) by descriptive factors such as rent and race will give results roughly similar to those achieved by the APHA scoring system.

Granting the fullest possible use of Census-type information through imaginative analysis, a basic substantive difficulty remains. No amount of study will reveal information that has not been collected. Findings will not disclose the environmental characteristics of an area that may be of controlling importance both as to livability now and appropriateness for future housing. Equally important is the omission of many items on sanitary and safety conditions in the dwellings. It is these—rat infestation, dampness, plumbing chronically out of order, dangerous stoves, inadequate means of egress, windowless rooms, hazardous wiring, poor refuse disposal facilities, dark public halls—to which enforcement agencies must address themselves in areas that are to be restored to an acceptable minimum standard for continued occupancy. However well a survey serves the needs of a slum clearance and public housing program, its efficacy may be questioned if it does not serve the needs of rehabilitation and conservation programs also. It is time for cities to ask whether information that may satisfy the requirements for federal aid is good enough and inclusive enough to shape all their local policies.

It is the purpose of this chapter to show by practical examples from the experience of large and small cities how survey results are being used as a constructive force over a broad front of public policy and action. Three groups of remedial measures will be considered: those intended to reclaim problem areas *as areas*; those intended to meet the needs of families *as people*; those intended to raise the standard of dwellings and their environment *as housing*.

DESIGNATION OF SLUM CLEARANCE AND CONSERVATION AREAS

BASES OF AREA DESIGNATION

What shall be done about a slum or blighted area depends on the answers to these questions:

Are conditions of housing (including both dwellings and the physical environment) presently suitable for family living and the rearing of children?

If not, are dwelling deficiencies so fundamental that clearance is the only remedy, or is it physically and economically practicable to correct them by rehabilitation of the present buildings?

Are conditions of the environment such that the area may properly be continued in housing use, or do they call for its allocation to other uses?

Surveys that omit appraisal of the environment cannot answer the first and third questions. Even with respect to the second question, it has been shown in chapter ii how crude survey techniques fail to dis-

close the full impact of substandardness on the one hand or the rehabilitation potential on the other. The one standard system now available that is capable of answering these questions, the APHA appraisal method, does so in the following manner.

Classification of areas by their total housing scores (dwelling and environmental penalties combined) shows conclusively whether or not they are fit places for family living. Areas cannot earn a rating of Grade A without the absence of serious deficiencies on any general scale; they cannot incur a rating of Grade D or E except by combinations of defects that essentially destroy their livability.

Critical areas having been identified by total housing scores, separate study of the dwelling and environmental scores (and of the subtotal scores in each) will indicate what can be done to remedy the problems found.

In determining whether the dwellings of an area should be cleared or might be rehabilitated, the key factors are the inadequacy of physical facilities in the dwellings, the seriousness of disrepair, and the feasibility of remedying both at a cost in line with the worth of the buildings and the rent-paying ability of groups who should be able to occupy them. As explained in chapter ii, it has been found in some cities that areas with median scores of 50 points or more for deficient facilities will generally have such a combination of fundamental defects—expensive or physically impracticable to remedy—as to preclude rehabilitation on an economic basis. These cities are specifying that slum clearance shall be carried out in areas with penalty scores above this level, and that areas with lesser penalties shall be studied for their possibilities of rehabilitation. A variant of this scheme uses the combined subtotal scores for dwelling facilities and dwelling maintenance, disrepair being a major factor in the latter. This approach is illustrated in Figure 3, where first priority of demolition is specified for areas with a combined score of 80 points or more and second priority for those scoring 60 to 80 points.

Cities using this approach have consistently found that such classifications are realistic. Field inspection by building specialists has repeatedly shown that clearance areas designated on this basis are those sections where dwellings cannot practicably be brought up to a satisfactory standard. Areas with lesser penalties are generally found to offer possibilities for rehabilitation through enforcement of legal standards or by voluntary action of the owners. Figure 3 shows also where programs of this type could be pursued.

Equally important in determining the policy for an area is a judgment as to whether it affords—or by replanning can be made to afford—a physical environment suitable for living. Environmental scores

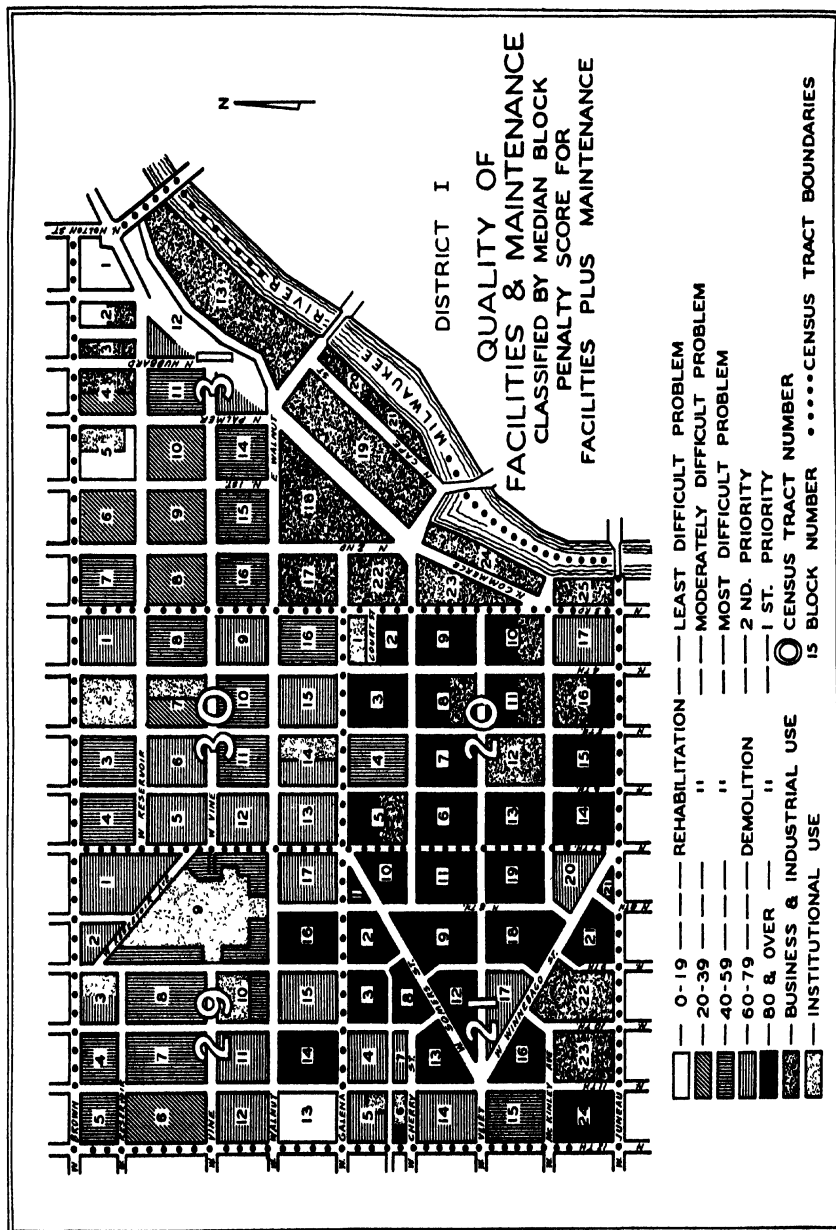


FIG. 3.—Possible clearance and conservation areas, Housing Appraisal, Milwaukee, 1948. Adapted from Figure 8 in "Blight Elimination and Urban Redevelopment in Milwaukee."

falling in Grade D or E will disclose those areas where livability has been destroyed by conditions outside the dwellings. Areas of this type, however, can often be restored to a good environmental standard by the replanning process incident to redevelopment. The critical questions here are:

How much of the deficiency lies in factors that will automatically be corrected by clearance of the site (such as crowding of the land by buildings)?

How much lies in factors that can be cured by the normal type of neighborhood replanning (such as inadequate playgrounds and schools)?

How much lies in factors that will defy such planning within the clearance site (such as excessive smoke, noise, or accident hazards from adjacent railroads or heavy industry)?

It should go without saying that a clearance area with major defects that will not yield to replanning within its own boundaries should be allocated to another use than housing. Disregard of basic environmental factors in the location of recent housing developments has lowered the quality of many of these and will probably shorten their useful economic life. A sound appraisal system forces these environmental factors to the attention of those who make policy for such areas. The judgments needed in relation to the scores are within the competence of any experienced staff of city planners.

MAKING THE DESIGNATIONS EFFECTIVE

The clearance or conservation status of slums and blighted areas should be taken into account not only in the programs of housing, redevelopment, and city planning agencies, but should be made the basis for all major programs in these areas. Related activities such as the provision of schools, public recreation spaces, health facilities and public safety services, the maintenance or improvement of public utilities and means of transportation, ought to be guided, at least in part, by the status indicated by the survey for these areas. The city's policy as to enforcement of legal housing standards may be notably affected, as may also be its policy on tax assessments.

All public agencies with programs in a clearance or conservation area should be promptly and fully apprised of decisions taken as to its future use—if in fact they should not share in making the decisions—in order that their programs may recognize the nature and timing of remedial programs affecting land use.

Two practical means of promoting such co-ordination deserve mention. One is to bring affected agencies together in a joint board or com-

mittee to review the survey findings and agree on future policy for the blighted areas. This may sound all too obvious, but the cities that are doing it effectively are few. Among the pioneers of this practice is Milwaukee, where policy on the treatment of blighted areas has been established by an active redevelopment co-ordinating committee, which includes such newcomers on the housing scene as the health department and the tax authorities. A similar pattern has been developed in smaller cities such as Brookline and Battle Creek. Joint review of the survey findings by a broad group of agencies—often including voluntary as well as official groups—has been characteristic of studies conducted in recent years by the APHA method. A second means of making the area designations effective is proclamation by the local legislative body or chief executive that these classifications represent the official policy of the city, with the requirement that no capital outlays shall be made in the clearance areas without approval by the planning commission or other specified body.

ENFORCEMENT POLICY IN CLEARANCE AREAS

Housing and redevelopment authorities have well-established procedures for dealing with areas scheduled for immediate clearance, and no discussion of these is needed here. Most cities, however, will be unable under their programs for the next few years to clear and rebuild all of their areas that need this treatment. Much housing slated for demolition must continue in use for longer or shorter periods. A modern survey and joint policy-making on the basis of its findings can contribute much to efficient administration in those areas for the interim period.

Shall an attempt be made to limit new construction or building modernization in these areas in order to minimize the cost of ultimate site acquisition? On the other hand, how far must essential standards be enforced for protection of the residents during the residual life of this housing?

The application of survey findings to such problems is illustrated by the policy adopted in Milwaukee. A housing standards ordinance recently adopted there confers broad enforcement powers on the public health department. These powers might have been used in a campaign of enforcement across the board to require that substandard dwellings in all neighborhoods be brought up to the legal standard as a prerequisite of continued occupancy. The character of enforcement has been adapted, however, to the long-term plans for each area as determined by analysis of a comprehensive housing survey. In clearance areas the enforcement program has emphasized the correction of insanitary main-

tenance and of accident hazards, but has generally not required toilet installations or other costly structural improvements that are required of owners in rehabilitation areas. Health Commissioner Krumbiegel has expressed the view that not even a solvent city can afford to go into slum areas one year, ordering improvements to the tune of hundreds of dollars per dwelling, and then come into those same areas a year or two later and buy back those improvements under eminent domain proceedings—simply because its right hand did not know what its left hand was doing.

CAN ULTIMATE TAKING COSTS BE CUT?

Virtually unexplored in American cities are the possibilities of applying survey results to the reduction of acquisition costs for slum clearance sites.

Asking prices and assessed values of slum properties are widely based on the speculative hope that housing will be replaced by commercial or industrial development or at least by multi-story, high rental apartments—an expectation that is often as unrealistic as the over-zoning of land for these purposes. A sober evaluation of such areas by local planning and redevelopment authorities, with a declaration that the only practical re-use is nonluxury housing, should do much to start the needed process of deflation. Zoning should be changed to reflect the new use designation, and this would pave the way to lower assessed values. Taxing bodies may resist such efforts on the ground that they were not established “to preside over the liquidation” of their tax bases. The problems here are beyond the competence of this writer to discuss, but it would seem reasonable to suppose that unsound tax bases must sooner or later be replaced with sound ones. In this instance there is the merit that shrinkage is to be taken in support of an agreed community objective: the elimination of slums. Perhaps there is no better place to begin insisting that tax policy adjust itself to the facts of life.

Where deferred clearance would give owners a considerable period of operation under reduced assessments, it might be easier than it is now to acquire built-on sites by eminent domain at a figure in line with their value for housing use.

Imaginative use of survey results may have a still further effect on taking costs: it may serve to bring down the price of slum dwellings as well as slum land. Where a community has adopted a modern housing standards ordinance and can show by its survey that the dwellings of a clearance site violate basic requirements of this ordinance, it should become possible to write down the asking prices for these dwellings by an amount approaching the cost of removing the violations. One study has suggested that the failure to put such a price on substandardness

resulted in a cost to the prewar public housing program of the United States over \$400 per dwelling unit.¹

It is true that the Housing Act provides grants for writing down inflated acquisition costs, but the available funds are small as compared with the need. Every means of stretching these funds should be explored, and it seems reasonable to expect that cities that find means of writing down site costs on their own will gain in the disposition of federal grants.

POLICY IN CONSERVATION AREAS

The absence of a declared policy for conservation of the housing in secondary problem areas has perhaps contributed as much to the spread of blight as any other single factor. Typical of these secondary problem areas are neighborhoods where dwellings are being converted to lower income uses, their upkeep neglected and nonresidential encroachments permitted. Many such areas have physically sound dwellings and an essentially unspoiled environment, and could be saved for housing use at an acceptable standard for many years.

Once the downward trend sets in, however, it would be a hardy owner who set himself to swim against the stream. His short-term interest—and often the only interest he can discern—is to exploit the downward trend, milking his property and selling if he can before the bottom drops out of values or the neighborhood becomes unlivable.

Let a city declare that such neighborhoods are to be continued in housing use, that decent standards will be enforced, that municipal services will be maintained accordingly, and much can be done to rout the characteristic mood of apathy and hopelessness. Conscientious owners will be encouraged; chiselers will be warned that they are out of fashion. The first essential is to identify these conservation areas and determine the kinds of programs needed to protect them. A basic reason for the past lack of policy has been that crude survey methods are of little help in making these determinations. Modern surveys can both identify the salvable areas and indicate the types of programs needed for their rehabilitation.

One step in this process is illustrated in Figure 3, where quality scores have been used to show the need for, and the relative difficulty of, dwelling rehabilitation. Further analysis of the area mapped, taking into account environmental factors and broader considerations of city planning, resulted in the designation of most of the blocks in the northerly third of the area for rehabilitation of their housing.

Such a declaration of conservation areas sets the stage for various

1. William J. Baron, *Low Cost Housing and Slum Clearance*, unpublished dissertation, Yale School of Law, New Haven, 1941.

kinds of protective and improvement measures. Inspection and enforcement programs of health and building departments may be focused on such areas—selected because they are poor enough to need improvement but good enough to be capable of it. Specific enforcement drives may be based on deficiencies revealed by the housing survey. Defective means of egress will be subject to correction orders of the fire or building department; inadequate sanitary facilities and insanitary maintenance will be called to the attention of the health authorities; the extent of actionable disrepair is revealed for corrective action by the department having jurisdiction in this matter. These are not hypothetical ideas. They are being put into effect in cities as small as Brookline and as big as Los Angeles. In the latter, not only did the survey findings document the need for enforcement programs in areas where this need had not been recognized, but the data persuaded the City Council to provide money and added manpower for this task.

In addition, individual buildings of the poorest type can often be closed by the health department or demolished by the building department to eliminate focal points of deterioration. Open space resulting from spot demolitions can sometimes be turned into needed playgrounds. The city planning staff may be able to point out other simple steps that would add to the livability of conservation areas, such as a cleanup of block interiors to supply common green space, or the blocking of certain streets to stop needless through traffic.

Subdivision of dwellings into small apartments or light-housekeeping units should be subject to strict quality standards, to avoid creation of a new type of slum and further deterioration of their neighborhoods. The encroachment of undesirable nonresidential uses can perhaps be checked if zoning authorities are alerted to the conservation status of a neighborhood and asked to tighten up on spot-zoning and the granting of variances. Nuisance-producing establishments can be subjected to the full range of local controls with respect to smoke, noise, rat harborage and other factors that undermine the livability of a neighborhood.

A survey that has included buffer strips around the recognized slums and blighted areas may serve to identify marginal zones that are not now in need of active conservation programs but that may warrant periodic resurveys to disclose the spread of deterioration into these neighborhoods.

A combination of programs such as these can help to arrest blight in many neighborhoods. All of the steps suggested can be carried out by the agencies existing in typical cities, and most of the steps require nothing new in the way of legal powers. The only things needed, as a rule, are recognition of the salvable areas and a resolve that official agencies shall work together to save them. This concerted action is the

hallmark of a modern housing program. An adequate survey furnishes the information on which it can be built.

Unfortunately, exaggerated claims are made from time to time for the possibilities of rehabilitation and conservation measures based on effective enforcement of statutes on health, occupancy, and building. Sometimes these claims seem to be the result of inexperience and naïveté in these areas of police power enforcement. Those who make them simply do not know what they are talking about. Other examples, however, give every indication of being less innocent. These claims apparently are put forward in the hope of distracting attention from the need for blighted area clearance, public aid in writing down excessive land prices, and public housing. Quite recently, one such campaign has been based on the excellent enforcement program in Baltimore, much to the chagrin of the officials responsible for the program.

One natural but regrettable result of this kind of exaggeration often has been to make those who see the need for the more drastic forms of redevelopment and for public housing suspicious and even antagonistic to programs for rehabilitation and conservation.

Both of these partial and distorted views are obstacles to sound planning and policy in redevelopment. None of the elements of a comprehensive redevelopment program—clearance, write-downs of land prices, private investment, public housing, police power measures, and the rest—is the policy equivalent of old-fashioned snake oil—good for all the ills of man or beast. Each has its place as well as its limitations. One of the tests of wise policy in redevelopment is how well all of these powers are fitted together with each focused on the part of the total job that it can deal with best.

Finally, one other relationship between police power measures and new housing construction, both private and public, should be noted here briefly. It is generally admitted that most cities have not enforced their police power statutes for housing as effectively as they might. The reasons for this failure are many and go beyond the scope of this section. One of them, however, is directly in point here. As a practical operation, it is hard to enforce police power measures when the supply of reasonably decent housing for families of lower income is short. And for these families it is usually short. Although some owners of sub-standard housing may comply, more or less willingly, with the orders of the public health or building departments, others will try by various means, legal and extralegal, to evade them. The more recalcitrant may even threaten to close up their buildings rather than to incur even a moderate expense for their improvement. Although this may often seem either an outright bluff or a very shortsighted policy, the fact remains that in times of acute housing shortage the owners, the enforcing of-

ficials, and the courts all know that putting on the street even a relatively few families would create a most difficult situation for continued enforcement.

Putting the matter the other way around, not only are clearance and new building not inconsistent with effective police power enforcement, but they actually can help create conditions in which it can proceed much farther than it otherwise might. On the other hand, the education of the public acquired in campaigns for the adoption and enforcement of reasonable housing standards can be also a useful support for clearance, write-downs of excessive land prices, and public housing.

HOUSING BASED ON FAMILY NEEDS

A rational program requires not only that policy be laid down for the betterment of problem areas *as areas*—for conservation of the community's tangible assets, discussed in the previous section; it requires also that new housing shall be built or present housing improved to meet the needs of people now critically underhoused, whether they live in slum clearance areas or outside them. Clearance and conservation policies for areas depend largely on study of the physical defects of the housing—inadequate dwelling facilities, maintenance, and neighborhood environment. Policy for the housing of people, on the other hand, depends on study of relationships between the housing and those who live in it. Under this heading come such questions as these: Are the dwellings, regardless of physical quality, large enough for the families who occupy them? Can proper housing be had at a reasonable cost, or is this less true of some groups in the population than of other groups? Do contemplated programs deal with the needs of atypical households and single persons? How prevalent is doubling-up of families, and how much housing need does it conceal? How will undoubling affect the rent-paying ability of families?

The findings of a technically competent survey will answer many more questions like these than have been asked—or have been necessary to ask—in patchwork housing programs of the past. Thoughtful analysis will disclose basic problems of families both in clearance areas and elsewhere. In doing so it may disclose types of underhousing not previously recognized by the community, and point the need for new constructive measures.

PEOPLE TO BE DISPLACED BY CLEARANCE

Families subject to early eviction from slum clearance sites of course have first priority in the study of rehousing needs. Public housing authorities have well-developed techniques for analysis of household size,

extent of doubling, income-rent relationships and other items that affect the design and pricing of low-rent housing. With appropriate modifications these techniques are applicable to private housing operations under a redevelopment program, and they need no general discussion here.

It should be noted, however, that data on family composition can be made to yield more information for the guidance of design and management policy than is usually extracted from them. Competent design of punch-cards and tabulation practice will disclose routinely such factors as size and race of household, doubling of families, presence of lodgers, form of tenure (rental or ownership), and amounts of rent and income. It is technically a simple matter to punch and tabulate a classification of families into ten or a dozen basic types according to their composition, apart from size; with or without both parents; without children; with preschool children only; with children in other age groups; with in-laws or other related adults, and so on.

Few survey users, if any, have more than scratched the possibilities of population data as a guide to project designers and those who shape the policies of management. Why should not the architect, the management official, and the sociologist be teamed in the study of these data? Lip service has been paid to this notion, but properly organized survey information provides a technical basis on which it can be carried out.

Among the elements of rehousing practice that might benefit are policy as to room size and the distribution of sleeping space as between single and double bedrooms; occupancy regulations such as those concerning the age at which children of opposite sex shall be provided with separate sleeping rooms; provision of enough dwellings appropriate to house the aged, whether living alone or with their children; recognition of the special needs of lodgers to be displaced by clearance and ineligible for admittance to new quarters designed for families. This last alone may be a major problem: a recent survey of one large city showed a ratio of more than one lodger or other unattached person for each three families in the slums and blighted areas.

REHOUSING NEEDS BEYOND THE CLEARANCE AREAS

Makers of policy must know the relationships of people and family groups to housing not only in the clearance areas but in other blighted and marginal areas as well. Are present dwellings large enough for the households living in them? If not, what sizes of dwellings do the seriously crowded families need—and at what cost? For what groups are rents so high in relation to income as to jeopardize other essentials of a sound family budget? Do minority race groups receive full value for their housing dollar, or are they subject to exploitation that warrants a

special priority for their rehousing? How many families live in scattered dwellings of extremely poor types that would be closed or demolished under vigorous enforcement of legal standards? What additional strain on the housing supply would follow such enforcement?

These and similar questions must be faced before a community can have any realistic picture of its total housing problem. Whether or not the early stages of a program can meet the indicated needs, only the city that has identified and measured them can develop a rational long-term program.

How thoughtful analysis of survey data sheds light on questions like those above can be illustrated by findings from a study in Los Angeles with the APHA method. In this case, the local agencies wished to learn the extent and nature of crowding in two central areas of inferior housing quality but not scheduled for clearance. This information was wanted to determine whether crowded conditions might make a significant proportion of the families eligible for quarters in public housing—and if so, what kinds of units they might require.

Crowded families were defined as those with an occupancy penalty score of 20 points or more. This criterion excludes all minor degrees of crowding and admits in general only those households whose crowding would make them eligible, if their incomes were not too high, for admission to public housing. Thirty per cent of households in the designated areas were found to have this degree of crowding, and analysis was made of these cases. Doubling-up of families proved to be a negligible factor, and the household data are interpreted here as applying directly to families.

While Latin-Americans (chiefly of Mexican origin) comprised two-thirds of all families in the first area, they accounted for four-fifths of the seriously crowded families there. Negro families were half of all those in the second area, but they made up nine-tenths of its crowding. Since these two groups accounted for the great majority of crowding, separate analyses were made of their family size and dwellings as a guide to policy for their rehousing. Salient findings are given in Table 5.

The table shows strikingly different causes for the crowding which, it should be borne in mind, the occupancy scores have shown to be of comparable severity in both groups. About two-thirds of the Mexicans lived in dwellings of medium size or larger—four rooms or more; their crowding was due to extremely large family size. Seventy-one per cent of these families had six persons or more, but only 6 per cent of dwellings contained as many as six rooms—the size required to avoid crowding under the rule of thumb of one room per person. The Negroes, on the other hand, showed normal family size—83 per cent under six persons—and their crowding was due to abnormally small size of unit—

93 per cent being of three rooms or less. Seventy per cent of the crowded Mexicans paid rents under twenty dollars per month; about the same proportion of Negroes showed rents of thirty dollars or more

TABLE 5

CROWDED FAMILIES IN TWO AREAS IN CENTRAL LOS ANGELES

Selected characteristics for Latin-American and Negro households with occupancy penalty scores of 20 points or more on the APHA rating scale. Unpublished data from survey in 1946 by the City Health Department.

	Percent- age of Latin- Americans	Percent- age of Negroes
Size of household*		
Large: 6 persons or more.....	71	17
Medium: 4, 5 persons.....	24	53
Small: 1-3 persons.....	5	30
Size of dwelling unit		
Large: 6 rooms or more.....	6	4
Medium: 4, 5 rooms.....	58	3
Small: 1-3 rooms.....	36	93
Monthly rent		
\$30 or more.....	4	69
\$20-29.....	26	20
\$ 1-19.....	70	11

* Doubling of families in a dwelling was negligible (about 2 per cent of the households in each ethnic group) The figures of the table therefore can be read as applying directly to families.

for dwellings of similarly poor quality but much smaller—converted light-housekeeping units for the most part.

These simple facts shed light on fundamentals of housing policy. One group needs larger housing than is commonly built, and at low rents: a clear case for public housing with maximum space provisions. The other group needs rehousing also, but in dwellings of normal size. Perhaps reconversion of the better dwellings to larger units would meet part of the need. In any case, the Negroes here present a much less difficult problem in terms of space demand and statutory cost limits on public housing. Further analysis showed that the excess rent paid by Negroes was due in part to furnishings and service supplied by the landlord, but that even with generous allowance for this factor they were receiving substantially less housing per dollar than their Mexican neighbors.

The significance of this example is threefold. The users of survey data took their job seriously enough to ask intelligent questions about the character of a special local problem; they expected the survey to supply fundamental answers; the survey was capable of doing so. The data disclosed intangible relationships that never meet the eye of the policy-maker touring the slums, though they may be sensed by social workers and others who spend their professional lives in such areas. To

document these relationships calls for thoughtful analysis and comparison of properly organized statistical materials.

In this instance, the key to understanding was the occupancy score, which separates the seriously crowded families from the others in one card-sorting operation. In a nonscoring method this separation could be crudely, though laboriously, approximated by cross-tabulation of household sizes against dwelling unit sizes. Aside from the primary separation of crowded families by scores, this bit of analysis has used nothing beyond the descriptive information that is carried by any crude survey and that should be available for tabulation wherever local survey sponsors have access to the data punched on cards.

American cities have demanded shockingly little of their housing survey data with respect to problems like the one discussed above. The low level of curiosity is due partly to the fact that crude surveys cover too little subject matter to give reliable answers on housing quality, but it is also due to the notion in many quarters that no questions can be asked of survey data except the kinds that are answered in standard bulletins of the Housing Census.

The example above illustrates another common pitfall in statistics. It might be called the "Delusion of the Undramatic Average." In these Los Angeles areas, only 30 per cent of the households in the sample showed crowding at or beyond the qualifying level of 20 points; 70 per cent showed lesser crowding or none. Figures for the average or median case, therefore, would not show a startling degree of crowding. The policy-maker who fails to look beyond the average or median values—those most convenient devices for summary comparison—may be lulled into a wholly false sense of security. In the present instance the 30 per cent of cases lurking beyond the median were 550 sample families. The sample having been one-fifth, these may be taken to represent a total of something like 2,500 desperately crowded families in these areas alone. No study would have been made of their problems had analysis stopped, as it sometimes does, with examination of the average. Bad housing conditions that do not predominate in an area are nonetheless real for families who must endure them.

Thoughtful analysis of competently organized information will shed light on other problems of people and their housing. It can measure some results of discrimination against minority groups with considerable exactness, in terms of what their housing dollar buys. For example, where median penalty scores for physical quality of housing are 75 to 150 per cent worse for homes of nonwhite families in every rent class than they are for white families in the same rent class—as they have been found to be in some cities—there is a scientific basis for judging who needs new housing first.

In broad terms it can be shown how much the typical family must pay in the market at present to obtain housing that meets a contemporary standard, and, conversely, what the family's chances are of getting a standard dwelling at any lower cost level. In one city it was emphasized that three quarters of the families in critical areas could pay little or no more than twenty-five dollars per month in rent, and that their chance for decent housing at this level was less than one in five. Such measurement supplies a needed warning against redevelopment schemes with little or no housing—on the clearance site or elsewhere—within the reach of those who need rehousing.

Thoughtful analysis can show the oncoming effect of enforcement drives outside the clearance areas: how many and what kinds of families will be displaced when action is taken to close the flats in damp basements, to tear down alley houses, or to thin out the occupancy of converted dwellings to a reasonable standard. These families too must be taken into account in a long-term housing program if a city seriously intends all of its people shall have "a decent home and a suitable living environment"—the stated objective of national policy under the Housing Act of 1949.

STRENGTHENING HOUSING STANDARDS

The preceding discussion has referred to official housing standards as though the achievement of them would assure a community of reasonably good housing. The fact is that few cities possess housing standards ordinances or other legal instruments that cover the requirements of decent housing in comprehensive fashion. A primary use of survey findings in most cities should be to point out the need for revising official regulations in the light of contemporary standards, and with appropriate emphasis on local problems revealed by the survey. Before considering this application of survey data, it is necessary to sketch the role of housing regulations and their traditional shortcomings.

PATTERNS OF HOUSING REGULATION

The weaknesses of customary legal controls have been summarized by an experienced group of public officials:

Adequate control of housing from the viewpoint of public health requires many forms of protection: the adoption and enforcement of health, safety and amenity standards for new dwellings of both single- and multi-family types, including their environment; the development and enforcement of standards of maintenance and occupancy for existing family dwellings; the treatment of peculiar problems (both as to initial character and operation) of special dwelling facilities such as lodging houses, trailer camps, hotels, and dormitories; and the extension of suitable con-

trols to the built-up areas beyond the corporate limits of cities so as to preclude the development or continuance there of slums.

Among the traditional instruments for housing regulation the local building code, generally speaking, is the most elaborately developed. It is, however, largely restricted to new construction and must cover many types of structures in addition to dwellings. Concern with structural requirements of other types of buildings results in neglect of fundamental requirements such as protection of water supply and sewage disposal, adequate spacing of buildings, reasonable room sizes, or even the provision of basic heating and sanitary facilities.

Zoning ordinances deal with land coverage and segregation of alien uses from dwelling areas, but they do not affect existing structures. They are often weakened by their preoccupation with the problems of business areas and the preservation of single-family districts, or by indiscriminating grants of variance. Frequently their standards are too low to prevent congestion of buildings on the land.

The maintenance of existing dwellings is sketchily dealt with—if at all—in building construction codes; health and fire department regulations may contain additional provisions on upkeep, services, and occupancy, but seldom are these regulations for existing dwellings either complete or conveniently accessible in toto. Exceptions do exist, but they are rare.

The creation and operation of lodging houses, trailer camps, or other special dwelling types are often covered by special laws or ordinances, but here as in other fields of regulation the controls are likely to be based on models borrowed from other communities rather than upon discerning study of local problems. Suburban areas commonly have only partial controls. Rural districts usually lack them altogether, or may be saddled with state-wide regulations which are meaningless in the absence of machinery for enforcement.

The composite effect of these various types of regulations that exist in most communities is anything but orderly or clear, and the practical results of the confusion are extremely serious. Housing provisions may be generally unknown and unenforced, in part because they are lost in chaotic documents. Health, building, and fire departments may operate each in ignorance of the others' activities, if not in fact of their responsibilities. Inspection is divided and may be sporadic and wasteful of man power. Broad powers, loosely worded, may hamper enforcement through the officials' fear of personal liability.²

In the years since this was written, significant advances have been made in the substance and organization of official housing standards both for new and existing housing. Especially important is the trend toward comprehensive codes, which take housing requirements out of scattered chapters of building codes or sanitary regulations and disentangle them from requirements for office buildings or warehouses. Ascher has suggested the constructive possibilities of this approach:

So long as we have one set of rules or ordinances about plumbing safety, another about structural safety, another about elevators, we make it possible for small groups with special interests to dominate the political judgments involved. It is this situation that gives rise to the stories that master plumbers and plumbers' unions

2. Committee on the Hygiene of Housing, Subcommittee on Housing Regulation, "The Improvement of Housing Regulation under the Law," *American Journal of Public Health* (November, 1942), p. 1265.

collaborate in preventing the authorization of new cost-saving materials and methods. So long as the only issue for decision by the legislature is in the realm of technology of plumbing, no one else will show up at the public hearing because the larger groups cannot see how their interest is involved or what they can effectively say.

If, however, the question before the council or the rule-making body is the adoption of a housing code dealing broadly with every phase of safety and amenity in living while encouraging the provision of economical modern homes—then you have a political issue of exciting scope. Then you may expect the consumer groups, the public interest groups, the social welfare groups—in short, the groups on whom you have to rely for backing in every advance achieved in public health work—to make themselves heard, to give the rulemakers backing for progressive steps. The arena will not be left to special interest groups by default. It will be occupied by progressive thinking people who want to enjoy more comfortable, healthful, economical living which accords with technological advance.³

The necessary long-range overhauling of official standards involves legal and substantive questions beyond the scope of this monograph. For an introduction to these questions, the student of housing regulation as such is referred to the two papers quoted. Within the province of this discussion, however, are some applications of survey data to the immediate strengthening of legal controls.

APPLICATIONS OF SURVEY FINDINGS

Although the standards embodied in a survey are not intended as a direct basis for the redrafting of regulations, they give a fair test of the adequacy of existing local standards. In New Haven, for example, seven of the basic deficiencies recognized by the APHA method were found to be more or less widespread in the slums, but only two of these were clearly covered by the applicable codes. In Los Angeles it was found that the state housing law, considered to be among the best of these, permitted baths and toilets of rooming houses to be shared by three times as many persons as are allowed by the survey standards. The latter being thought reasonable by local officials, a change was sought in the law.

Regulations intended to protect even the barest essentials of living should obviously require at least the absence of conditions defined by the APHA method as basic deficiencies. The incidence of these in a locality will suggest which of the gross forms of substandardness merit special emphasis in the strengthening of present regulations. A few simple requirements tailored to meet real needs can perhaps be more effective than an elaborate code imported from some city across the continent with essentially different problems.

Regulations should be addressed as far as possible to the specific

3. Charles S. Ascher, "Regulation of Housing: Hints for Health Officers," *American Journal of Public Health* (May, 1947), p. 512.

problems that characterize the common types of low-grade dwellings in the locality, whether they be tenements, rear-yard houses, basement dwellings, or big old houses converted into smaller quarters. The facts may justify outlawing some of these and imposition of drastic controls on the continued use of others. Tenants in one- and two-family houses may need safeguards not extended to them in those jurisdictions where legal standards for existing dwellings apply only to multi-family dwellings. Inadequate regulations for rooming houses—whose characteristics are revealed by a good housing survey—may also need bringing up-to-date.

It is a proper use of survey data to study landlords' gross income from slum properties, revealed by the aggregate of rents charged in any building. Where facilities provided are grossly out of line with rents collected, there is justification for the fullest enforcement of official standards, for no cry of confiscation or undue hardship can be raised. Owners habituated to high returns from bootleg conversions of large houses into light-housekeeping units (which went on in tremendous volume during the recent war and have continued generally since) will not readily lower their rate of profits by making costly physical installations to serve the added families or by reducing occupancy to former levels. One of the big fights of the next few years may be expected in this quarter, and the time to begin examining the facts is now. Several recent surveys have demonstrated that the quality of accommodations provided in converted dwellings is so far below the general standard for their community as to warrant special regulations and enforcement. In Battle Creek, 32 per cent of surveyed units with three rooms or less (virtually all created by conversion) were substandard in the extreme sense of having three or more basic deficiencies, as compared with 14 per cent for all larger units. Similar results have been found in Atlanta, Philadelphia, and other cities which have studied the spread of this new type of slum.

CHAPTER V

TOWARD EFFECTIVE SURVEYS

THE last two chapters have dealt with screening surveys and intensive studies of blighted and near-blighted areas. They emphasize the usefulness of these types of studies for the planning of local redevelopment programs in which a number of official agencies and nonofficial organizations have important parts to play. Although the discussion in these chapters is not exhaustive, it does point out specific kinds of information that proper survey methods can produce to enable these various agencies to see the scope and character of the job to be done and how their personnel and powers may be effectively employed. The basic argument is that survey methods of these kinds should be designed primarily to produce reliable, sensitive information that will indicate not only the location of blighted areas but also, in considerable detail, the conditions and degrees of blight. Only when these objectives are realized can the agencies formulate a comprehensive, intelligent plan that will have promise of valuable and continuing results.

This final chapter takes up a related but separate question. Once survey content and character are determined, how can the survey best be organized and conducted? What does experience show to be the most effective administrative setup in most circumstances? What are the major pitfalls to be avoided? In short, after responsible officials and civic leaders have determined what survey information they need, how do they get it?

Like the other parts of this monograph, this chapter has been written primarily for those officials who will make most of the basic decisions and have the final responsibility for the results. It does not deal with the details of survey staff organization, procedure, and supervision important as these are. Most of these matters are discussed in Parts II and III of the APHA Committee's, *An Appraisal Method for Measuring the Quality of Housing*. Volume A of Part II—*Survey Director's Manual*—should be particularly useful on these questions.

BROAD SPONSORSHIP AS A SOURCE OF STRENGTH

Nothing will contribute more to the effectiveness of a blighted area survey than to organize and conduct it as a joint undertaking of several

agencies. The object is not to muster an imposing letterhead array of sponsors but rather to make sure that available resources will be used in the most efficient way and that the findings will have the fullest possible usefulness in the community.

Tremendous wastes of time and money have been incurred by the duplication of local surveys in the early phases of America's emerging housing program. Agencies with only slightly different needs have conducted separate studies more often than not: sometimes because they did not know of information collected by others, sometimes because they did not trust that information, often because the information was not organized for use by others than the agency collecting it. Not the least contribution of good survey techniques can be to minimize this kind of waste by providing trustworthy information in forms that meet the needs of many users.

It has been stressed in earlier pages that housing, redevelopment, and planning agencies have much to gain from co-operation with health and building departments. Other official agencies may also be valuable members of the team and often unofficial groups as well.

Have welfare agencies, for example, a problem of finding suitable homes for client families and of setting rent allowances in relation to the quality of housing offered? Would they benefit from accurate information on the character of housing in low-income areas? Would housing standards in the community be strengthened if these agencies adopted the same criteria of a substandard home as are being used by other agencies and as are incorporated in the survey?

Is the compilation of facts on blighted areas by tax assessors enough like that in the survey so that tax officials would benefit from access to the survey data? If so, would it be reasonable to ask that some of the assessment staff be assigned to work on the survey? In any case, might not assessments be more consistent and realistic if checked against the quality ratings of the survey? Can policies be worked out with tax officials to assure that buildings below a certain standard as measured by the housing survey that revert to the city for tax delinquency shall be demolished or otherwise taken out of use?

Would the fire department find, as it has in some cities, that survey results are of sufficient value in disclosing specific fire hazards to warrant assigning personnel to the study?

Are there realty interests, including neighborhood associations of property owners, that would like to see the study extended beyond the areas of urgent concern to official agencies and that would contribute toward the cost of such extension, thus assuring comparable data for both groups? The day is past when survey techniques were good for

nothing more than diagnosing the rock-bottom slums, and it is not romantic to expect that property-owners and forward-looking realtors would support a well-conceived study covering areas of potential blight as well as the recognized critical areas.

Is there a local university research department with a research interest in the problem areas perhaps already making independent studies that could be combined with the official survey? Would its facilities be of help in designing the survey or in analyzing the results?

An obvious problem in seeking to widen survey participation is that information wanted by one group or another may tend to warp the survey from its original purpose or run away with it altogether. If this is the case, joint sponsorship with this agency or group as one of the partners will be out of the question. There is much experience in recent years, however, to show that a well-designed survey of the type considered here will serve the needs of a wide range of agencies and programs. Sometimes a few schedule items or a supplementary schedule must be added for special purposes, but often the standard schedule will suffice and all that is needed is for the potential new sponsors to know that the survey is being made.

Officials in many cities have expressed the view that joint evaluation of problem areas has given them the first solid technical basis for a broad attack on problems of slum clearance and conservation.¹ In planning a co-operative study it becomes necessary for each agency to declare what districts are of interest for its program and what it hopes to learn about those areas. Overlapping or conflicting interests are aired and gaps in the total program become apparent. Criteria of adequate housing, varying widely from agency to agency in the past, are unified on the basis of standards used in the joint survey, and the concept of substandard housing gains clarity and force in its application to all programs.

Bodies that share in the cost of making a survey have a stake in using its results; the findings of a co-operative study are unlikely to be used only by the initiating agency and then to languish in its files.

Finally, broad sponsorship paves the way for wholehearted public acceptance of program recommendations based on the survey facts. Proposals reflecting agreement of a widely representative group of agencies will be more readily accepted as in the interest of the whole community than will the recommendations of one or two bodies against whom the charges of special interest or inexperience can be leveled.

1. See, for example, the symposium "Systematic Inspection of Substandard Housing," *The American City* (May, 1948).

WORKING AGREEMENTS

Multiple sponsorship will, of course, demand more skill both in the planning and execution of the study than single sponsorship. Its benefits will not be realized without competent administration of the undertaking. Potential sponsors must be identified and contact made with them in the earliest stages of planning in order that their special needs and possible contributions may be reflected in the organization of the project. Initiators of the survey should bring about a meeting of all active sponsors before a final plan is adopted so that all may understand the scheme and the responsibilities entailed. Such understandings should be formalized in a memorandum of agreement that clearly specifies who is responsible for how much of what, and when.

The importance of such an agreement can hardly be overstressed. A mere agreement, of course, is no substitute for the genuine will to co-operate, but the will to co-operate can founder on many rocks, among them being unclear definition of authority, failure to specify the amounts and timing of contributions, and misunderstanding as to precisely what kinds of information the study will produce. A clear working agreement, whether or not it has the status of an enforceable contract, can contribute immensely to efficiency of the job from start to finish.

One survey sponsored by six agencies and conducted with marked absence of friction or confusion was based on a memorandum of agreement covering the following points:

1. Description of the survey project: areas to be studied, reasons for their selection, survey procedures to be used, ratio of sampling to be employed, over-all budget in time and money
2. Statement of objectives with respect to the programs of participating agencies; specification of the types of information to be supplied for these objectives
3. Terms of co-operation: contribution of each sponsor in cash to be appropriated, personnel time to be assigned or physical facilities to be made available; responsibilities of staff director; designation of a working committee of sponsors' representatives to be available for consultation as needed during progress of the study
4. Breakdown of the project into a sequence of basic operations, with a time schedule for each
5. Specifications as to the nature of a preliminary report by the staff to principals of the sponsoring agencies; provisions for meetings of the principals thereafter to consider the application of findings to programs of their agencies

These items are cited not as a model but as an indication of the kinds

of factors that need to be specified if a joint survey is to go ahead without misunderstanding and lost motion.

CENTRAL RECORDS AND CONTINUING INVENTORIES

In view of the number of potential users of housing survey data, it may be desirable to make the completed schedules and punch-cards of the survey available to responsible agencies or individuals in some central place—either the office of one of the sponsoring agencies or elsewhere. Establishment of such a central registry might promote the filing together of original or duplicate records from a variety of agencies concerned with housing and families in problem areas. There are obvious operating problems in any central registry, but the advantages deserve more consideration than cities are giving them.

The value of central housing records will be greatest, of course, if these are kept up to date by continuous inventory and are not regarded as a one-shot kind of information. A hopeful factor here is that since good surveys can be made by the regularly available staffs of city agencies, the trend is toward continuous housing inventories as a normal part of local government operation.

SOME COMMON OPERATING PROBLEMS AND PITFALLS

CHOICE OF SURVEY AREAS

Intensive surveys are often weakened by failure to include significant problem areas. This is most likely to happen when the study is made for the purposes of a single agency, but even where sponsorship is broadened the preconceptions of some individual may tend to limit the geographic scope of the study. A fundamental step in the design of any survey is to consider how wide a range of areas should and can be appraised within the available resources. Often where sampling is appropriately used, it will be possible to cover the areas of marginal quality as well as the flagrantly poor ones, revealing the need for blight prevention as well as for slum clearance and redevelopment. There is serious danger in restricting a survey to the poorest areas alone. Once the results for these are in hand they will pose so many problems that officials and public alike may tend to forget that other areas only slightly better have been left out of the picture. Deterioration in those areas, proceeding unchecked for lack of conservation programs far less costly than slum clearance and redevelopment, may largely offset the progress made in the primary slums.

One means of promoting a balanced selection of survey areas is a thorough study of Census data for all parts of the locality that might

possibly be considered blighted or approaching this condition. Problem areas as delineated by Census data will often need to be enlarged for purposes of an intensive survey, especially if the data are those of 1940. Inclusion of buffer strips around the indicated problem areas will not only check on the spread of substandard conditions since the date of the Census, but also will help to reveal where and how the problem areas taper off.

USE OF SAMPLING—THE NATURE OF SAMPLING ERROR

Both the cost and the usefulness of a survey may be largely determined by the decision whether sampling shall be used—with a specified percentage of the dwellings taken to represent the whole—or whether every dwelling shall be enumerated. Some survey sponsors, distrusting the accuracy of sampling studies, have insisted on complete enumeration without stopping to consider the nature of sampling error or its consequences for the work in hand. Substantial sums may be wasted, or at least be poorly used, in enumerating every dwelling when a properly designed sample would delimit problem areas and indicate the kinds of treatment they need. Even the best sample, however, will not supply the information needed for house-by-house programs such as property acquisition in clearance areas or intensive law enforcement in conservation areas. It is often wise, therefore, to plan the initial study on a sampling basis in order to outline quickly and economically the areas that warrant different kinds of basic treatment. Provision can be made at the outset for a follow-up study that will fill in with complete enumeration for areas the sampling study shows to be in need of intensive action programs. Surveys are too seldom designed to provide for this desirable progression from lesser to greater intensity of study.

There is much confusion among laymen as to the nature of error in sampling surveys and the limits within which sampling can safely be used. One factor in this confusion is the unreliability of some recent national opinion polls. National samplings which take a few hundred or a few thousand persons to represent the total population of the United States are especially subject to a type of error which need not enter into local housing surveys: the error of bias in the sample. In nationwide surveys where one respondent may stand for a hundred thousand others, or even more, and where the sample is not or cannot be selected on a strictly random basis, it is of the greatest importance that the sample cases be selected so as to reflect factors of possible significance in the responses, such as difference in economic status, education, race, or national origin, and so on. Selection of names from telephone directories, for example, would underrepresent the lowest income groups and introduce an economic bias into the sample.

In local surveys of blighted areas, bias can be avoided by two simple precautions. The first is stratification of the sample: selection of the correct proportion of sample cases from each basic type of dwelling structure. In practice this means the identification on maps of single-family, two-family, and multi-family structures (the last perhaps being divided into larger and smaller types of buildings) and then the selection of one in five (or whatever the sampling ratio may be) of the dwelling units which occur in each of these kinds of buildings. The importance of this step lies in the fact that physical quality of housing often is directly associated with the differences in structure types; such stratification will prevent distortion by overrepresentation of one type and underrepresentation of another in the final statistics. The second safeguard is randomizing the sample: selection of the individual sample cases from each type of structure by chance, rather than by taking every fifth dwelling (or other proportion) of the specified type along the street. This is readily done with one of the published series of random sampling numbers, the use of which is familiar to statisticians. Using such a mechanical aid in randomizing protects the sample against unconscious patterns of selection which might otherwise operate in the mind of the person constructing the sample.

The extra cost of designing a sample with these precautions will be a microscopic fraction of the total survey cost, and it is one of the best investments in accuracy that can be made.

Once the sample has been constructed to avoid bias, the accuracy of results is a function of the size of the group to be surveyed and the ratio of sampling, as shown in the table below.² This table shows the proportion of dwelling units that must be sampled in areas of various size to give 95 chances out of 100 that the occurrence for any item of the survey as shown by the sample will not vary by more than 5 percentage points from what would be shown by a complete enumeration. For example, it can be said of samples with the characteristics given below that if they show a 50 per cent occurrence of any item the chances are 95 out of 100 that a complete enumeration would show not less than 45 per cent occurrence or more than 55 per cent. This specification is widely used by statisticians to define the acceptable limit of error in sampling (called "sampling error limit" in the discussion below).³ It accords, for instance, with current requirements of the Public Housing Administration.

2. Condensed from Table 3 of *A Method for Employing Sampling Techniques in Housing Surveys*, Bureau of Research and Statistics, New York State Division of Housing, New York, 1948.

3. The limit of error becomes somewhat less as the percentage occurrence deviates from 50. It is 3 per cent, for instance, with occurrence of 90 per cent or 10 per cent in the sample. This correction has been disregarded for purposes of this presentation.

Units in Group To Be Sampled	Units in Sample	Ratio of Sampling	Percentage of Units in Sample
400.....	200	1:2	50
800.....	267	1:3	33
1,200.....	300	1:4	25
1,600.....	320	1:5	20
3,600.....	360	1:10	10
5,600.....	373	1:15	7
7,600.....	380	1:20	5
50,000.....	397	1:126	1

Thus while half of the cases must be sampled in a 400-unit area to meet the accuracy requirement, only one case in twenty need be sampled in a 7,600-unit area. These statements hold true only so long as the results are to be analyzed in terms of the total survey area without breakdowns into subgroups. When analysis is to be made by subareas or other breakdowns (such as owner-occupied and tenant-occupied dwellings), progressively higher ratios of sampling are required to maintain the same degree of accuracy. If the 7,600-unit area were to be analyzed by breakdowns that represent as few as 1,600 units in any subgroup, error might exceed the specified limit unless the sampling ratio were raised to one in five, giving 320 sample cases to represent 1,600 actual cases.

It is this need for analysis by breakdowns of the total sample that has kept the ratios of sampling high—often in the range of one in three to one in five—in housing surveys, even for large cities where a sampling ratio of one in one hundred or less might provide a reliable picture of conditions in the city as a whole. It will be seen from the table above that the specified accuracy will be maintained with the indicated sampling ratios if analysis is always made in groups of the order of 200 sample cases or more. Such groupings can often be achieved by combining the sample data for contiguous blocks of generally similar character—a step which is normal practice in the analytic procedures of the APHA method.

Where sample data must be analyzed by single blocks or other groups which give substantially less than the desirable number of sample cases per group, the sampling error limit will of course increase. However, with sampling ratios of one in two to one in ten the error limit will be less than ten—a permissible maximum—if the analytic breakdowns are maintained at one hundred sample cases or more, as shown in the following table on p. 83.⁴

The discussion above has been concerned with the reliability of individual items in a sampling survey—distributions of occupants by race,

4. Condensed from charts prepared for the writer by Rollo H. Britten and Regina Loewenstein.

WITH SAMPLING RATIO OF	IF THE NUMBER OF CASES IN THE SAMPLE IS:			
	25	50	100	250
The chances are 95 out of 100 that the true percentage will not vary from the percentage shown in the sample by more than:				
1 in 2.....	14	10	7	4
1 in 3.....	16	11	8	5
1 in 4.....	17	12	9	5
1 in 5.....	18	12	9	6
1 in 10.....	19	13	9	6

incidence of substandard toilets, and the like. When scores are assigned to quality items and ratings of areas are built on their median or average scores, a separate question arises: How accurate is an area classification based on the scores of sample dwellings? The accuracy of the average score in a sample (unlike the accuracy of individual items) is not alone a function of the sampling ratio and sample size. It depends also on the distribution of scores (frequency in each class interval) in the particular series of cases under consideration. For this reason no standard tables of the sampling error limit can be given like those above for the error limit of individual survey items; the error limit of any particular average score must be separately calculated. For practical purposes, however, it should be true that samples with acceptable error limits for individual items of the survey will also be characterized by acceptable error limits for the scores that measure the cumulation of those items.

MODIFICATION OF STANDARD METHODS

A common weakness of surveys has been the failure of sponsors to insist that the subject matter of a standard method be modified to meet legitimate local needs. It may not be recognized that the results would be strengthened by adding schedule items to cover items such as lack of window-screening in a malarial region, or other specific hazards correctable under existing regulations. On the other hand there may be unquestioning acceptance of time-consuming items that very seldom occur in the community, as has happened sometimes with the daylight obstruction item of the APHA method.

It is always wise to consider whether a special classification of dwelling types, racial groups, or other descriptive items is needed to deal with local conditions. True meanings of the data are often obscured by inability to produce separate figures for rear-yard houses, peculiar local types of multiple dwellings, rooming houses devoted to family accommodations, and so on.

The essential point here is that no standard method can anticipate all the problems of every locality, and survey sponsors should ask for modifications where it can be shown that these would benefit their programs. Local variations, however, should not be casually imposed on a

standard method. The first test of any added item or change in schedule information should be whether some user has definite types of analysis in mind for which the special information is necessary.

STAFF DIRECTION—RESPONSIBILITY OF PRINCIPALS

Some surveys have been seriously hampered by failure to secure a competent staff director. It is easy to suppose that a survey, once launched, will take care of itself with only routine supervision, but this is not the case. The director's job is a demanding one. He may be responsible for a staff of considerable size and for the expenditure of large sums. Administrative ability is quite as important as research experience; it will be relatively more important where the study is made by a standard method that provides clear instruction for all the operations. Assignment of a party hack to the directorship of one recent survey has cost thousands of dollars for correction of errors that would never have occurred with competent supervision.

More common than inept direction of the staff, however, is the failure of agency heads to meet their responsibility for thoughtful study of the findings to see what they actually do mean for the programs of their agencies. Too often they seem to assume that what they are buying is a survey report by the technical staff, and that when the report is in the job is finished. In such a climate a staff report is about all the work will amount to. Submission of such a report is merely the point at which the job of the principals begins. Some surveys with greatest actual effects on their communities are those for which no formal report has ever been issued, but where the heads of participating agencies have met regularly to consider the findings of the staff and have continuously shaped their programs in the light of these findings.

Definite machinery for the interpretation of survey results is essential if the potential values of the study are to be realized. Where a survey is the co-operative project of several agencies this machinery can well take the form of a joint board of review, composed of the agency executives or their chief assistants.

ADMINISTRATIVE SAFEGUARDS

Where a study is made by outside survey specialists the responsibility for efficient staff work is theirs, and officials contracting for the work may be little concerned with the specialists' organization. Where the study is made by personnel of the sponsoring agencies, however, safeguards of economy become the responsibility of these agencies and of the director. Whichever method is used, there should be assurance that essential controls of accuracy are maintained along with economy and speed of execution.

Efficiency of a survey project can be substantially influenced at the time of making cost estimates and by the process of making those estimates. Personnel costs for field enumerators and office staff are, of course, a function of the number of dwelling units or blocks to be surveyed; with respect to these costs it is about as economical to survey a given area slowly with a small staff as quickly with a large one. It is sometimes overlooked, however, that use of a small crew may needlessly increase the unit cost of the work by extending the period of fixed overhead expense for director's salary, office rent, and similar items. An important function of cost estimating, therefore, is to seek that combination of staff size and job duration which will give the lowest practicable burden of overhead cost.

An orderly procedure for estimating to achieve this balance is explained in the director's manual of the APHA survey method.⁵ Although designed with special reference to that method, this approach is adaptable to other survey systems. An integral part of an estimate under this scheme is a graphic time schedule of each survey operation in calendar weeks or months. These time schedules provide a convenient basis for later review of the survey's progress in relation to the estimates. This is imperative in a job of any size in order to evaluate productivity of the staff, to tighten up loose ends in the organization of the work, and to judge whether problems originally unforeseen may require modification of the survey plan in order to complete the job on time and within the funds available.

Selection and training of the staff will go far toward making or breaking the survey. Previous experience in housing inspection should not be a condition of employment, for any survey system worthy of the name provides for full training of field and office staffs. Care should be taken, however, to enrol only those who show willingness to absorb the necessary training. A skimpy training period is the poorest kind of economy, for reliability of the information to be gathered depends on understanding conveyed to the staff during the instruction period. With schedules such as those of the APHA method it has been found necessary to devote a week to training of field workers, including practice enumeration. Even with simpler schedules of the Census type several days should be allowed for training and practice. Field supervisors are normally needed in the ratio of one for eight to twelve enumerators, and the office staff should be under the full-time supervision of a competent chief clerk.

Accuracy of the results should be maintained by procedures for verifying adequate samples of field reporting and of clerical work in the of-

5. *An Appraisal Method for Measuring the Quality of Housing*, Part II, Appendix A-1. New York: American Public Health Association, 1946.

fice. Good practice in spot-checking the field work calls for independent re-enumeration of 5 to 10 per cent of the schedules of each worker. Cost estimates for a reputable survey will make full allowance for all such checking operations. No corners should be cut on this type of expense; a single basic error in field or office procedure if allowed to continue throughout the study may undermine the reliability of all the findings.

STATISTICS WITH MEANING

Surveys produce statistics, but that is not their purpose. The basic test of a good survey is not how many tables, charts, or maps it can be made to produce but whether it will supply clear answers to the questions on which policy and programs must be built. A five-page report that answers active questions may be far more valuable than one with hundreds of tables or charts answering questions that nobody will ever ask.

A meaningful plan of tabulation is the foundation of usable statistics and of the charts, maps, and interpretations that flow from those statistics. A full statement of the theory underlying good tabulation practice would outrun the scope of the present discussion,⁶ but a few underlying principles can be set forth to help those who buy surveys in judging the adequacy of tabulation schemes proposed.

First, there should be no barrier to ready tabulation of any item of information gathered. This means that punch-cards should be used, either of the Hollerith or marginally punched type, and that any item worth putting on the schedules is worth punching on the cards. It also means, as pointed out earlier, that punch-cards should remain available for analysis whenever special analysis is wanted.

Second, there should be a limited series of standard tabulations, routinely made, sufficient to give a general understanding of the conditions surveyed. Such tables should be made uniformly for all subareas of the survey and also for the survey as a whole. These tables should show the percentage distribution of dwelling units and households by all descriptive characteristics such as rent and family size, the percentage incidence of each deficiency item, and the percentage distribution of quality scores if these occur in the survey method. These three types of tabulation will reveal the general nature of problems by subareas and for the total survey.

Third, there should be provision for supplementary tabulations when they are needed in response to specific questions of policy. The tabulation plan should not, however, specify an elaborate series of tables be-

6. The serious student of survey practice may wish to consult chapter v of the APHA survey director's manual cited in the previous footnote, for a fuller discussion of theory and practice in housing survey tabulation and analysis.

yond those for areas mentioned above. The point here is that even a simple survey method contains the possibility of hundreds or thousands of cross-tabulations, and it is sheer waste of ingenuity to design a tabulation plan that tries to predict which of these cross-tabulations will be wanted. Examination of the standard tables for areas will disclose relationships that require one type of supplementary analysis in one area and a wholly different type of analysis in other areas. For example, in an area composed of single-family houses there is no need to study whether tenements are bad, but in a district with both types of dwellings supplementary analysis may be required to disclose whether tenement conditions are much worse than indicated by total figures for the area. A rigid scheme that calls for the same kind of tabulations for every area of the survey will either produce meager results over-all or will waste much effort in the pursuit of meaningless data. If punch-cards permit the analysis of any combinations of data desired, the refined tabulations can be better selected during the course of the study than in advance.

In closing, it might be noted that a fair test to make of a survey specialist before engaging his services would be to ask just what tabulations and analyses his scheme provides for, and why they are to be made. The clarity of his thinking on this point should tell a great deal about his mastery of survey practice.

TAKING THE COMMUNITY INTO PARTNERSHIP⁷

A written report will usually be required to present the survey findings to sponsoring agencies and perhaps for general publication. Since the character and scale of a report will be largely determined by the objectives of a particular study and by the composition of its audience, no set pattern can be suggested. Worthy of mention, however, are certain generally helpful mechanics of reporting and methods of following up a report to gain support for action programs.

A basic test of any report is whether it is addressed to a clear purpose in terms of the policies and programs to be affected. It should be written with a definite group of readers in mind, whether these be the principals of the sponsoring agencies, some other special group, or the general public. Text should be simple and free from technical jargon. The organization should provide clear chapters or other subdivisions, reflected in a table of contents from which the reader can readily find his way into any part of the report that particularly interests him. Charts, maps, and photographs should be used to the extent that will speed telling the story, but they do not take the place of lucid text.

7. Most of this section has been taken verbatim from the writer's text in the APHA manual of survey procedures, previously cited: *Survey Director's Manual*, pp. 85-88.

A summary of findings and recommendations at the beginning of a report is usually desirable. This should be as short as possible, giving only the end results, not the full reasoning behind them. The reader who believes the job a good one may accept the findings without going farther; he who challenges the study can find his answers in the fuller text that follows.

A small number of maps will usually suffice if tables and charts (a less expensive form of presentation) are organized to do their share of the job. Photographs are most effective when they show the conditions—interior as well as exterior—which occur in various parts of the housing quality range. Pictures of dwellings can be shown with the appraisal forms or with notes explaining the quality ratings in terms of the chief deficiencies. An example of this is given in Figure 4.

Whether or not a report is produced for general circulation, much can be done to develop public support for the program developed as a result of the appraisal. Often at least one newspaper will assign a reporter to study the data and prepare feature articles and photographs of conditions found. A condensed version of the full report might be specially circulated to all city department heads, members of the city council or board of aldermen, educators, clergymen, labor and civic leaders. In some cities movies have been found useful, though these are usually not effective unless someone with considerable skill is available to make and edit them.

Local organizations such as men's service or luncheon clubs, labor unions, church groups, and women's clubs will welcome good brief talks on the results, perhaps with lantern slides or large copies of maps and charts.

Public school teachers or the faculty of a local university may be interested in the results for teaching purposes. In some cities even the children in elementary schools have carried out simple studies of housing conditions in their own neighborhoods, with suggestions such as might be supplied by the survey director.

These or similar devices for spreading awareness of the local housing problem should be brought to the attention of the sponsors in a general report. A corrective program will take money and meet resistance; it can have no better assurance of success than an educated public opinion.



A converted dwelling unit on the third floor of this house in St. Louis incurs a penalty score of 190 points and five basic deficiencies.

This two-room light housekeeping suite offers its four occupants:

A toilet down two flights of stairs and shared by five other families.

A bath in the same location, shared to the same extent, and without hot water.

A single stair and a knotted rope for exit in case of fire.

Fire hazards in the form of oil stoves throughout the building and dangerous electric wiring extensions by amateurs.

A kitchen sink with cold water only, a hot-plate for cooking, and no laundry facilities in the building.

Disrepair of plaster and woodwork sufficient to invite the harborage of vermin.

No privacy in sleeping: one bedroom for parents and two children.

Inadequate space for sleeping: less than the 50 square feet of bedroom space per person which is required by ordinances generally.

Inadequate space for daytime use: a combination kitchen-living-dining-room that fails to meet the size requirements of a living-room alone.

FIG. 4.—The meaning of penalty scores

APPENDIX

CAN THE APHA METHOD BE CONDENSED?

THE PROBLEM

It is often asked whether there is some middle ground between the rudimentary information on housing quality supplied by the Census of Housing and the refined information of the APHA technique. As noted in chapter ii, even some users of that technique who consider all of its results essential for comprehensive programs believe that a cruder evaluation may be justified where the immediate goal is limited or speed essential. Can a system be developed that retains most of the APHA method's sensitivity but requires substantially less time and expense to carry out?

This question was not overlooked by the APHA Committee on the Hygiene of Housing in developing its method. The Committee provided an abridged appraisal of neighborhood environment, which preserves essential features of the standard procedures but is much more rapid in execution. In this part of the technique, true economy lies in reducing the number of schedule items, for each item requires a separate series of mapping operations, calculations, or both. With respect to the dwelling survey procedures, however, the situation is different. Enumerators will observe many conditions in each dwelling whether these are recorded or not. Addition or subtraction of a schedule item thus involves, in many cases, only a pencil mark more or less in the field and a negligible difference in the later office operations. Much of the enumerators' time goes to overhead operations like going to the area being surveyed, waiting for the door to be opened, and making known the purpose of the survey. Economies by reduction of schedule content are therefore by no means proportionate to the number of items dropped. This point, which was stressed by some APHA users in the URS poll, was the basis of the Committee's view that economy in a dwelling survey would best be achieved by sampling, not by weakening the schedule content.

This view seems a sound one in general, but nevertheless some situations may arise where all the refinement of the APHA technique is not needed and will not be used. For example, if a single agency must carry the cost of studies to delimit slum-clearance areas, there might be justification for an abridged dwelling survey method to serve this limited objective.

Studies looking toward abridged procedures were undertaken by an interdepartmental committee of federal housing specialists in 1945, with the writer serving as consultant. The purpose was to learn whether a dwelling schedule with perhaps ten to fifteen quality items in place of the APHA's thirty, and with an appropriately condensed rating scale, would reliably classify dwellings into the same parts of the quality range as do the standard schedules and rating scale. It was hoped that results of the studies would permit redesign of the 1950 Housing Census with greater sensitivity throughout the range of housing quality. Considerable promise was shown by the limited results obtained before the exigencies of postwar federal housing programs forced abandonment of the studies.

In connection with the present monograph the writer undertook to renew this line of investigation. Again, however, the work was very limited in scope. The results, which are summarized below, must be considered merely as an indication whether this approach warrants further testing, not as proving or disproving the soundness of a specific abridgment of the APHA method.

SCOPE AND LIMITATIONS OF AN ABRIDGED SURVEY METHOD

Before describing this second experiment, something should be said as to the elements that must characterize an abridged dwelling survey method if it is to preserve essential merits of the APHA technique and yet make possible materially lower costs.

Along with the usual descriptive items on dwelling and household characteristics, the condensed schedule should carry qualitative items that will give reasonably sensitive measurement of housing deficiencies in milder problem areas as well as in the critical slums. This is not merely a question of the number of items, but also of the kinds of items. If the schedule treats only gross deficiencies such as substandard toilets and bathing facilities, it will often be blind to the conditions of secondary problem areas—those above the slum level.

The strength of the APHA method lies in the fact that it measures to some degree the compliance of a house and its neighborhood with twenty-seven of the thirty Basic Principles of Healthful Housing, as formulated by the Committee on the Hygiene of Housing. Therefore, when a body of housing comes up on the APHA scale with a grade A rating, this is affirmative evidence that nothing very serious can be wrong. A schedule that measures compliance with only six or eight of the basic principles, however, may give a spuriously good classification to housing that violates many of the other twenty-odd principles. Since any abridged technique depends heavily on index items that represent

or are commonly linked with other items not enumerated, a basic test is whether the index items cover in the best possible way the whole range of dwelling deficiencies—in water supply, waste disposal, natural and artificial lighting, ventilation, means of circulation and egress, cooking and housekeeping facilities, storage space, heating equipment, space provision in rooms, infestation and other insanitary conditions, fire and safety hazards, deterioration and disrepair, and crowding as measured by persons per room, by area per person, and by doubling of families regardless of dwelling size.

Having covered those basic deficiencies like shared toilets and lack of baths which characterize the worst slums, the schedule must also somehow catch a number of those secondary defects that persist as impairments of housing quality considerably above the slum level. Index items chosen for sensitizing function should, of course, be such as will tend to occur in mediocre and obsolescent housing throughout the United States. Among the secondary items which may be workable as sensitizers of an abridged schedule are the following: lack of piped hot water in the dwelling unit, inadequate number of closets in relation to number of rooms in the unit, lack of installed washbasin in the unit, lack of installed laundering facilities on the premises. If items of this sort can be carried on an abridged schedule, it will have a better chance of not going blind to the existence of obsolescent dwellings as distinct from genuine slums.

If the goal is speed and economy, items should be omitted that are cumbersome as to enumerator training, time required for enumeration in the field, or need for office calculations from the field data. Other items may be forced off the schedule because enumerators will not have the right to observe conditions in all parts of the dwelling—a limitation that does not apply to the APHA method because its enumerators are usually inspectors of an enforcement agency or are deputized as such. Limitations indicated in the present paragraph will usually rule out such items of the APHA method as the one on obstruction of daylight by neighboring structures and the one on area of rooms. Omission of the room area item will prevent calculations of area per person which underlie two basic items on occupancy crowding.

If a further goal is consistent and objective reporting—identical answers on the same condition by different enumerators—items should be omitted that call for skilled observation or quality judgments by hastily trained enumerators. This will normally mean omission of items on various insanitary conditions of maintenance, safety hazards, and the like which are satisfactorily handled in the APHA method with adequately trained inspectors.

Lastly, a reputable abridgment of the APHA method must probably

omit the fundamental item on state of repair. Here too the problem of reliable evaluation has been mastered in the APHA procedures, but the standard item requires considerable training time and field supervision as well as some processing of data in the office. No satisfactory condensed version of the item has yet been developed to the best of the writer's knowledge. The 1950 Census item on dilapidation, using certain concepts of the APHA deterioration item, disregards some essential safeguards of accuracy embodied in the original.

In summary, a practicable abridgment of the APHA dwelling appraisal will probably be one that tells little or nothing about the adequacy of repair and sanitary upkeep. It cannot measure occupancy crowding in terms of area per person, though it can in terms of persons per room. Its chief value will probably lie in the measurement of the fixed physical characteristics of the dwelling, as represented by the facilities items of the APHA rating form.

Even with these limitations, an abridged method that could produce consistent classifications of dwellings according to their inherent physical quality might be an effective tool for designating clearance areas. If it showed fair sensitivity in the middle part of the quality range it might also be useful in designating presumptive conservation areas. It would not, however, tell much about the remedial programs needed to conserve them. It would be inadequate to guide the enforcement activities of health and building departments, the revision of obsolete housing codes, and other elements of comprehensive programs discussed in chapter iv.

AN EXPERIMENTAL ABRIDGMENT: PROCEDURES USED

The URS experiment recognized the limitations set forth above. It attempted to test in a very small way the reliability of a condensed dwelling schedule containing facilities items but no maintenance or occupancy items.

One hundred fifty completed (scored) unit appraisal forms were obtained, thirty from each of five cities using the APHA method.¹ These specimen cases were selected for one factor only: an even distribution of cases from the poorest to the best total dwelling scores found in the slums or blighted areas of each city. Type of structure, size of unit, race of occupants, and all other factors were left to chance.

In order to test the validity of index items from one region to another, cities were selected with the widest possible geographic spread: Los Angeles, Minneapolis, St. Louis, Atlanta, and New Haven.

The cases received were arrayed, city by city, in the order of their

1. A completed appraisal form is shown in Figure 1.

subtotal penalty score for facilities. Seventy-five cases were then selected to represent the range from poorest to best dwelling facilities. Fifteen cases were taken from each city, three in each of the five following classes:

CLASSIFICATION OF TEST DWELLINGS: APHA SCALE

QUALITY CLASS	RANGE OF PENALTY SCORE FOR FACILITIES	SPECIMEN CASES	
		Per City	Total
A.....	0 to 24 points	3	15
B.....	25 to 49 points	3	15
C.....	50 to 74 points	3	15
D.....	75 to 99 points	3	17*
E.....	100 points or more	3	13

* The Minneapolis sample provided only one case in class E. Two of class D were therefore substituted.

The reader will recall from chapter ii that class C above begins at the level of facilities score—50 points penalty—that is widely accepted in APHA surveys as a dividing line between presumptive clearance and nonclearance areas. Accepting this fact, areas that fall into one or another of the foregoing classes by virtue of their median facilities scores may be considered to have the following characteristics:

Quality Class	Treatment Indicated	Action Group
A and B	Little or no slum clearance justified	I
C	Presumption of need for extensive clearance	II
D and E.	General clearance, with high priority	III

If a condensed schedule and rating scale will consistently classify dwellings into these three broad action groups in the same way that the standard APHA scale classifies them, then it can be said that the abridgment is successful for the purpose of designating slum clearance areas.

To test this possibility, twelve facilities items of the APHA method were chosen. Adjusted penalty scores were established for these items, and the seventy-five sample dwelling units from the five cities were re-scored for these twelve items.

Table A-1 gives the items chosen (with their item numbers on the APHA appraisal form) and also the maximum penalty that can be incurred for each on the abridged scale. Items and scores used in this test follow the scheme used in the earlier test with the federal committee, but minor adjustments were made in the light of that experience.

The maximum total score of 61 points that can be incurred on the abridged scale compares with a maximum of about 300 points that can generally be incurred on the standard scale for deficient facilities in ur-

TABLE A-1
APPRAISAL ITEMS AND PENALTY SCORES EMPLOYED IN THE ABRIDGED APPRAISAL

Item	Maximum Possible Score: Points
1. <i>Access to structure:</i> from rear yard or alley.....	1
7.* <i>Location of unit:</i> in basement or on 4th or higher floor of walk-up.....	1
8. <i>Kitchen:</i> shared with other unit, lacking refrigerator.....	5
9. <i>Toilet:</i> a) Location†	11
b) Type (penalty for privy or "frostproof hopper")	
c) Sharing with other unit	
10. <i>Bath:</i> a) Location†	5
b) Type (penalty for cold water only in bath)	
c) Sharing with other unit	
11. <i>Water supply for unit:</i> outside structure, outside unit, or cold only in unit..	5
12. <i>Washing facilities:</i> no washbasin in unit, no installed laundry tub available on premises.....	2
13. <i>Dual egress:</i> lacking for unit.....	10
14. <i>Electricity:</i> none installed in unit.....	5
15. <i>Heating:</i> no central system.....	1
16. <i>Rooms</i> lacking installed heat.....	5
17. <i>Rooms</i> lacking window.....	10
Total.....	61

* Item numbers are those in the APHA Appraisal Form, Figure 1.

† Location covers "None on Premises" as well as "Outside the Structure" or "Outside the Unit."

ban slums. The quality class intervals were therefore reduced to one-fifth of those cited above, as follows:

CLASSIFICATION OF TEST DWELLINGS: ABRIDGED SCALE

Quality Class	Range of Penalty Score for Facilities	Treatment Indicated	Action Group
A.....	0 to 4 points }	No clearance	I
B.....	5 to 9 points }		
C.....	10 to 14 points }	Presumptive clearance	II
D.....	15 to 19 points }	Clearance urgent	III
E.....	20 points or mor }		

RESULTS OF THE EXPERIMENT

Test results are summarized in Table A-2, which shows the shifts in classification of the seventy-five cases according to the abridged scale as compared with classification by the standard scale. A shift from one action group to another is considered to be a significant error of the abridged scale. A shift from one quality class to the other in action group I or III is considered a nonsignificant error for the purposes of such an abridged scale.

Although the small number of cases may deny this pilot test any statistical significance, results shown in Table A-2 are thought to indicate good possibilities in this approach.

Bearing in mind that the twelve items of this scale must do the rating job performed by twenty items on the standard scale, it seems en-

couraging that seventy of the seventy-five cases show no significant shift as defined above, with fifty-eight showing no shift whatever. The scale appears to measure good houses as good and poor ones as poor.

There is indication that such a schedule and scale can be developed for national application in the fact that these five widely scattered cities show rather similar results. No city had more than two cases of significant shift, and two were free from significant shift. The index items chosen here would seem to have represented fairly well those items on the full schedule that made for good or poor classification of dwellings across the country.

TABLE A-2
GEOGRAPHIC DISTRIBUTION OF TEST DWELLING UNITS, WITH DIFFERENCES
IN CLASSIFICATION BY APHA FACILITIES PENALTY SCORES
AND BY EXPERIMENTAL ABRIDGED RATING SCALE

	Total Cases	No Shift*	Nonsignifi- cant Shift†	Significant Shift‡
Los Angeles.....	15	12	2	1
Minneapolis.....	15	11	2	2
St. Louis.....	15	12	3	—
Atlanta.....	15	13	2	—
New Haven.....	15	10	3	2
Total	75	58	12	5

* Same quality class (explained in text) under abridged scale as under standard APHA scale.
† Same action group (explained in text) under abridged scale as under standard APHA scale, but different quality class as a shift from class A to B in group I, or D to E in group III.
‡ Different action group under abridged scale from that produced by the standard APHA scale. One of the Minneapolis cases shifted from group I (class B) to group II (class C). The other four cases shifted from group II (class C) to group III (class D).

Furthermore, such shifting as occurred was predominantly downward. All five significant shifts were in this direction (four from action group II to III, one from group I to II. Nine of the twelve nonsignificant shifts were also downward (eight from class D to E, one from class A to B). This bias seems more desirable—if any bias must be accepted in the scale—than the opposite one would be. If the new scale shows houses as slightly worse than they actually are, they will come in for closer scrutiny when remedial action is taken, but if the scale were to show mediocre houses as good ones they would generally escape further examination by official bodies.

It should be stressed that this is a test of accuracy not only in the slum range but all the way up the quality scale. All fifteen of the specimen units that fell in class A according to the standard scale showed some penalty on that scale; that is, they were not in class A because of having zero scores. Fourteen of these cases were also in class A according to the condensed scale, but again this was not because they escaped penalty. Eleven of the fourteen showed penalties of one point or more under the abridged rating. Although such a scale would seldom be used

TABLE A-3

CLASSIFICATION OF FIFTEEN DWELLING UNITS IN ATLANTA BY APHA FACILITIES PENALTY SCORE AND BY EXPERIMENTAL ABRIDGED RATING SCALE

[illegible]

- Item numbers are those in the APHA Appraisal Form, Figure 1

Item Numbers are those in the AP-HA Appraisal Form, Figure 1

to evaluate fine differences between good grades of housing—and should not be called on for this task—it is an encouraging sign of accuracy that this crude scale does not confuse good houses with perfect ones.

Detailed results of the test are given for Atlanta in Table A-3, which shows how the scale achieves its sensitivity throughout the quality range. Some items contribute heavy penalty scores in the lowest classes only (see items 8, 9*b*, and 14). Other items contribute heavy scores in the poorest classes, with lighter scores in the better classes and no scores in the best class or two (items 9*a*, 10*a*, and 11). Still others, as 10*b* and 10*c*, do not operate at all in the poorest classes—bathtubs cannot be shared or be of the cold-water type in slums which lack this facility altogether. And finally, there are items that operate with little or no difference as to penalty throughout the range from class E to those dwellings which are good enough to fall in class A but poor enough to incur some penalty. Item 15 is an instance. Item 12 is even more significant as an example of this kind of secondary sensitizing item. All the poorest units of the Atlanta sample incurred the 2-point penalty for lack of both laundry tub and washbasin, but even the five best units incurred the 1-point penalty for lack of one or the other of these facilities. Items 12 and 15 are not needed to distinguish the slum dwellings, but they are definitely needed to prevent the poorer dwellings in the better areas from escaping penalty and being heralded as thoroughly modern and satisfactory housing.

RELATION TO CENSUS DATA

It may be asked whether such a scale as this will serve any useful purpose when the 1950 Housing Census results become available with tabulations of the number of deficiencies per dwelling unit. Will not that form of rating on a quasi-scale, as discussed in chapter ii, serve the same purpose? To some extent it will, but there are two essential differences between the condensed appraisal considered here and a quasi-scaling from Census items.

First, the proposed Census treatment would necessarily give equal importance to each deficiency: the lack of any facility would carry the equivalent of one point on a rating scale. Such a scheme is obviously less discriminating than the one considered here, with penalty values ranging from 1 point to 11 points according to the seriousness of the deficiency.

Second, the Census schedules fail to cover some types of items that contribute much to the sensitivity of the present scale. Of the twelve items in this experimental scale, the Census has equivalents of three, partial equivalents of three, and no counterpart of the other six. Some

of these six are needed for accuracy at the upper end of the scale, as discussed above. Others of the six, notably the items on windowless rooms and lack of dual egress, contribute to measurement of differences at the lower end of the scale.

QUESTIONS REMAINING UNANSWERED

Encouraging as the results of the present shoestring test may seem, no such scale should be considered trustworthy—and no procedures should be adopted that anticipate the use of such a scale—without further testing and validation. Among the unknowns are factors such as these:

Will these items and scoring values produce consistent results when used across the country in operations large enough to have statistical validity?

Are these particular items the best ones for the purpose? Are all of them needed, or could some be dropped without appreciable loss of accuracy?

Would the results be improved by changing the distribution of scoring weights for the various items?

Are all of these items workable under the field conditions that would obtain in a “quickie” survey? Can all of them be taught to enumerators in a brief training period such as the sponsors of a cheap survey may insist on? Can all of them be enumerated without the right of entry into all parts of the dwelling? How much cheaper is the abridged version than the standard method—for field enumeration? over-all, including standard tabulations? (It should be borne in mind that the present experiment involved no field work, and not even an actual survey schedule; it was done merely by rescoring information collected under operating conditions of the standard APHA method.)

Without extensive testing on these and similar points, no abridgment could be represented as a dependable compromise version of the APHA method. It is to be hoped that the necessary studies can be undertaken by the United States Public Health Service, now responsible for training in the APHA method, or by some other research body qualified to say when a sound abridgment has been produced suitable for use across the United States. Such studies should evaluate not only the economies of a condensed method but also the use limitations, for official purposes, of the schedule and tabulations recommended.

PART II

URBAN DENSITIES AND THEIR COSTS: AN EXPLORA-
TION INTO THE ECONOMICS OF POPULATION
DENSITIES AND URBAN PATTERNS

BY
WILLIAM H. LUDLOW

EDITOR'S FOREWORD

POPULATION densities are one of the most obvious and most discussed aspects of the urban scene. In the broadest terms, relatively high densities are probably the physical characteristic that most commonly distinguishes urban development from that of small towns, villages, and other rural areas. Among urban centers in this country, particularly the larger ones, over-all densities vary greatly. On the whole, they are lower than those of comparable European and particularly Continental cities. Lower densities have been one of the major objectives of many housing and urban reformers. The garden city idea of Ebenezer Howard and his disciples is a good example. Many, but not all, blighted areas have higher densities than most of the better residential districts in the same localities.

Despite these and other facts that are apparent from the most cursory review of practice and writing in urban planning and development, we actually know pitifully little about urban densities and their relations to the functions and problems of cities. For this reason, probably no other single question is more difficult or troublesome, to both public and private agencies responsible for urban redevelopment programs, than the determination of appropriate population densities for the residential areas to be rebuilt or rehabilitated. Opinions, guesses, traditional ideas, and prejudices are not hard to come by; verified facts are scarce and established relationships between densities and other phases of urban development and the life of people in cities, are even scarcer.

URS, therefore, submits this analysis, "Urban Densities and Their Costs," by William H. Ludlow, not as a definitive discussion, but as the subtitle indicates, an exploration into one phase of a large and complex subject.

We have had even more than the usual difficulty in deciding on a title. Most of the available data are on expenses, i.e., the money outlays required for housing and other facilities and services in varying density patterns, rather than on costs in the economic sense of the efforts and disutilities of human beings in producing these goods and services and in carrying on their day-to-day activities within the patterns more or less fixed by population densities. We are concerned, however, with

costs in this sense rather than solely with expenses or expenditures, which measure only some of them. For this reason we have used the more inclusive term in the title of the monograph.

In chapter i Mr. Ludlow has outlined the general subject and has indicated the part he has concentrated upon and how he has gone at it. He makes clear, I believe, that he has been concerned here primarily with the relations between various population densities on the one hand, and the costs of housing, of public services, and of urban businesses and industries, on the other. He has brought together the results of most of the investigations on these questions, has pointed out their limitations, and has suggested further lines of research and study that are needed. The larger part of his monograph, chapters ii, iii, and iv, deals with these matters. In chapter v he has taken up more directly the question of densities in redevelopment projects on which decisions have to be made before research produces the additional knowledge we so sorely need.

In addition to these general comments, I would emphasize with Mr. Ludlow two or three other points. Even in what may properly be called an economic analysis, costs or expenses are only one item or factor. Benefits or income, both monetary and in direct human satisfactions, are equally significant. Scarce and sketchy as the facts on costs and expenses may be, the measurement of income items is even less adequate. Again, Mr. Ludlow recognizes that, even if a satisfactory economic analysis could be made of various kinds and patterns of density, it would not be conclusive in the practical problems that planners and redevelopers face. The preferences of housing consumers—the people who live and work and bring up their families in urban areas—should be given at least equal weight. And here our information, let alone our knowledge, is most unsatisfactory.

Finally, nearly all of the studies Mr. Ludlow has drawn on for information were made not long before World War II. Their results, therefore, are in terms of the much lower price level of that period. If it be assumed that the postwar inflation has increased about equally the capital, operating, and maintenance expenses of these facilities and services, the relative costs or expenses indicated by these analyses would hold substantially for the present. Whether or not this assumption be acceptable, it is clear that we need studies of these kinds in current dollars as well as the additional investigations that Mr. Ludlow outlined.

As is well known in the profession, Mr. Ludlow is one of the urban planners who have given the most thought and study to population densities. Near the end of his work with URS he became Principal Planner of the Redevelopment Agency of the City and County of San Francisco. Before then he was a staff member of the Program of Education and

Research in Planning at the University of Chicago. Previously he had worked with the Citizens' Housing and Planning Council of New York, the National Resources Planning Board, the New Jersey State Planning Board, and the Tennessee Valley Authority. He is now consultant on urban redevelopment to the Puerto Rico Planning Board.

C. W.

CHAPTER I

INTRODUCTION

FOR many years the process of urban building has proceeded with very little concern for the underlying problems created by high density of population and intensity of building development in and around the heart of the city and sometimes in outlying locations. Such high density areas often suffer from lack of light, air, and play space, traffic congestion, and inadequate parking facilities. On the other hand, sprawling urban growth at the fringes, strung out along the highways or scattered in haphazard and partially built subdivisions, is exceedingly expensive to service with streets, utilities, schools, and other public and private facilities. Apparently overuse of land in some sections, underuse in others, and design of buildings, streets, and neighborhood layouts generally unsuitable to modern living characterize great portions of our cities and metropolitan areas. These conditions coupled with spreading urban blight are both socially undesirable and economically wasteful.

With some exceptions our urban communities have grown up under practices engendered by wildcat land speculation and relatively ineffective control of thousands of independent land subdividers and builders whose major concern is making a profit from their operations regardless of the social and economic effects in the neighborhood and in the city as a whole. Public regulations governing land subdivision and building have been too lax in some respects and too restrictive and wasteful in others.

The individual private developer, whether of a single lot, a large subdivision, or an apartment project, ordinarily makes his decisions as to density type and design of structures in order to obtain (or at least to maximize the chances of) the greatest financial return. In making this decision, an important factor is land cost in relation to expected rental or sale price. Even with cheap land, he often strives to crowd the greatest number of lots, houses, or apartments on his parcel, restrained only by municipal regulations and his own judgment of how little land per dwelling the market will accept. If the elimination of old buildings is involved, the cost of the demolished structures becomes part of the land cost, thus generally making for a considerable increase in density or intensity of use. If the developer must provide new streets and utilities,

he attempts to minimize the expense per dwelling by the same process of increasing density. In some cases, the difficulty of assembling enough suitably located land to accommodate the desired amount of investment may lead to densities far in excess of even that required to absorb profitably the land and site development costs. Thus, the structure of the ordinary real estate market tends to put densities, in terms of individual properties, on an ever ascending escalator.

At the same time, the desire of many urban dwellers for more light, air, openness, and amenities of the suburbs leads to sprawling new developments in the urban fringes. During the 1930's there was a very definite trend toward more open planning even for lower-priced dwellings. Whereas frontages for detached dwellings were formerly as low as twenty-five feet around such cities as Chicago and Detroit, fifty and sixty feet frontages are now becoming standard practice, according to the Federal Housing Administration.¹ Multi-family housing also has tended toward lower population densities, particularly in the popular garden-type apartment. In order that these lower densities can be achieved, particularly for lower-priced housing, inexpensive land is essential. Such land is generally available only in the urban fringes. Thus, a larger and larger share of new housing is being located outside of the central cities.

Although local subdivision regulations and Federal Housing Administration rules have been a major force in improving the quality of many new urban areas, little effective control has been exercised on the location or size of new developments. Because of the poor quality and premature timing of much land subdivision and ensuing tax delinquencies and clouded titles, many large, suitably located areas are now unmarketable. Land developers have created a hodgepodge of scattered and unrelated developments interspersed with many small and large areas of unused land.

As long as in-migration and formation of new families create a potential demand exceeding the supply, the housing market can support both the new residence areas on the periphery and the higher density areas in the older sections. But in the long run, our cities cannot support both higher interior densities and excessive urban spread without creating unused land in either the older or the newer sections or in both.

To service new outlying areas, additional streets, extensions of sewer and water lines, new schools, and police and fire stations—all the concomitants of urban living—are demanded. Municipal officials find themselves hard pressed to provide and operate these extended services

1. Miles Colean, *American Housing, Problems and Prospects, the Factual Findings* (New York: The Twentieth Century Fund, 1944), p. 30.

in addition to maintaining services in older parts of the city. Although many municipal officials and writers on municipal finance and urban development are becoming increasingly aware of the high public costs entailed in sprawling urban communities and thousands of unused lots wholly or partially provided with municipal services, the ordinary citizen is generally unaware of these costs that he is bearing.

Under new urban redevelopment procedures, city building is in some ways freed from some of the forces that have previously shaped the patterns of land use and density. An urban redevelopment agency can set land prices in relation to desirable density rather than let land prices determine density or location of new housing. Furthermore, the difficulties and costs of large-scale land assembly are handled by the redevelopment agency, so that the builder need not be hampered by an existing pattern of small lots. In applying urban redevelopment to vacant or sparsely built outlying land, past mistakes of poorly planned subdivisions can be rectified. At the same time more effective control of new subdivisions will also be necessary to prevent future mistaken development in the urban fringes. New criteria and standards must be established to replace some of the forces that formerly determined density and city pattern.

Urban redevelopment procedures, however, do not eliminate completely the problem of land cost and assembly. They merely set it in a larger framework of social accounting. If land costs are to be written down, either the taxpayers in general will shoulder part of the burden, or the particular owners of properties in redevelopment sites will take real or book losses, or both groups will be partially affected. Perhaps a more important consideration is that the new patterns and densities of urban development present an opportunity to reduce permanently operating and maintenance expenses, both public and private, and at the same time to provide more desirable living conditions. Thus the design and density of specific projects must be appropriately related not only to the special conditions that surround them, but also to the over-all economically and socially desirable pattern of city development. Essentially these problems are very much the same whether an individual project is carried out by a single large private investor, by a group of small private developers, or by a public housing authority.

TYPES OF DENSITY

In order to make clear the various connotations and implications of the concept of density, four significant types of population density may be identified. In general, density measures indicate a relationship be-

tween a given area of land or floor space and population or families housed in that area.² In the classification given below, there is a successive increase in the size of the area considered, from the individual room or apartment to the entire city or metropolitan area.

FLOOR AND ROOM DENSITY

This type of density is intended to measure the degree of crowding and privacy within individual dwelling units, including both houses and apartments. The most frequently used measure is persons per room. Because of variations in room sizes, however, it is also well to measure the square feet of floor space per room, per person, or per family.³ In any case, these measures are rather crude in that good or poor design may greatly affect the livability of dwellings having the same over-all density ratios. Although relatively crude and frequently lacking exact comparability, such measures of density within dwellings serve to indicate the relative degree of spaciousness, privacy, and livability, and may be used as a basis for more accurate comparisons of construction and operation costs. Valid comparisons of efficiency can be made only between buildings with approximately the same room and floor densities.

LOT DENSITY

Measures of this type of density indicate the adequacy of open space around and between buildings which affects light, air, privacy, noise, and outdoor living space immediately adjacent to the dwelling. Obviously, lot density will depend largely on the type of residential structure. Detached single-family structures generally have the lowest lot densities and tall apartments the highest. Row or group houses and low (two- or three-story) apartments will generally have lot densities in the middle ranges between those two extremes. It is possible, however, that widely spaced, multi-story apartments with low floor densities might have lower lot densities than crowded and closely built houses. At the same floor and lot densities, the higher apartment structures often provide considerably better light, air, and openness.

2. For a more complete discussion of the many problems involved in measuring densities of various types, see Henry S. Churchill and William H. Ludlow, "Measuring Urban Population Densities," *Pencil Points* (June, 1944). This article is part of a report by the same authors, *Densities in New York City* (New York: Citizens Housing Council, 1944). See also Ministries of Health and Town and Country Planning, *Design of Dwellings* (Dudley Report) 1944, Appendix: "Site Planning and Layout in Relation to Housing," pars. 13-33.

3. In the case of apartments, floor space may be measured in terms of net rentable area within apartments or gross floor space within the building including public stairs, halls, elevator shafts, and other facilities used in common by more than one family.

No matter what the type of structure or mixture of structures in a given area, the most commonly used measure of lot density is persons or dwellings per acre⁴ or, conversely, square feet of lot area per person or per dwelling. A related measure is that of bulk of building to lot area, which may be stated by coverage and height of buildings or by the ratio of total floor space (or cubage) of buildings to lot area. These measures have more significance when the type of structure and, if possible, the height and coverage of buildings are stated. Since street space immediately adjacent to the lot is as important as space on the lot in providing light and air (although not for outdoor living space), it is often desirable to include with the lot half the area of adjoining streets.

Lot density is often controlled by provisions in zoning ordinances that prescribe the minimum area of lot per dwelling unit for houses and apartments. For multi-family housing projects, the maximum floor area or cubage ratio is sometimes used as a control. For specific regulation of redevelopment projects, the control of floor area ratios is particularly useful, sometimes in combination with control of number of dwellings. In terms of residential costs, lot density is important in relation to cost of land per dwelling or per room, and to a certain extent in the cost of providing streets and utilities.

RESIDENTIAL AREA DENSITY

A single residential neighborhood is commonly used as the smallest area for making this type of density measurement and generally comprises the district served by at least one elementary school. The land uses included, in addition to residence and streets, are commercial and community facilities that serve primarily the residents of the area, such as playgrounds, small parks, local stores and service establishments, churches, and neighborhood centers. High schools and colleges, hospitals and businesses or industries serving a large section of the city are commonly excluded. It is difficult, however, to set up altogether satisfactory classifications as to which facilities serve primarily the local neighborhood and which serve large sections of the entire urban area.

Such densities may be measured in terms of persons or families per acre or per square mile. They form a basis for assessing the adequacy of space for small parks, playgrounds, schools, local shopping, and community facilities, as well as serving as a general measure of living space, particularly for planning new large residential areas of neighborhood size. Cost of public services, including streets, utilities, parks, school

4. Dwellings (i.e., houses or apartments) per acre is a more exact term than the commonly used families per acre. A dwelling unit can be precisely defined in terms of a minimum amount of cooking equipment. A "family" is a more nebulous term. Furthermore, "number of families" does not indicate how many dwelling units may be vacant.

grounds, and to a lesser degree fire and police protection, can be satisfactorily measured only in terms of relatively large residential areas.

CITY-WIDE AND METROPOLITAN DENSITIES

The area included in this type of density measurement should ideally comprise all the contiguous territory developed primarily for urban purposes as parts of a single metropolitan complex. Metropolitan districts as defined by the Bureau of Census in 1940 include all incorporated places and minor civil divisions that are contiguous to a city of at least 50,000 population and that have a minimum density of 150 persons per square mile.⁵ The Census of 1950 is using a rather complex definition to delimit "standard metropolitan areas" composed of entire counties or groups of counties (towns or groups of towns in New England).⁶ A more simple and, in some circumstances, a more exact defini-

5. There are certain exceptions to this rule. See Fifteenth Census of the United States, *Population*, Vol. II, Part I, pp. 2-3.

6. This definition was worked out by an interagency committee of the federal government established in 1947 by the Bureau of the Budget. In all, 168 areas have been marked out in accordance with this definition. The official explanation of "standard metropolitan area," according to *Population of Standard Metropolitan Areas: April 1, 1950* (preliminary counts, November 5, 1950, Series PC-3, No. 3—Bureau of the Census) is:

"The standard metropolitan areas for which data are presented in this report are areas defined and established cooperatively by a number of interested Federal agencies under the direction of the Bureau of the Budget for purposes of compilation and presentation of a wide variety of statistical data on a uniform areal basis. It is expected that these areas will become widely used not only for data from the 1950 Census but also for other statistics compiled by Federal statistical agencies and perhaps by State and local governments and private bodies.

"Except for standard metropolitan areas in New England, each area has been defined in terms of one or more entire contiguous counties. The county was chosen as the constituent unit because it was believed that more kinds of statistical data are compiled or are obtainable on a county basis than would be the case for minor civil divisions or other kinds of small areas. In New England, however, the town rather than the county is generally the basic geographic unit for statistical compilation; and for this reason the New England standard metropolitan areas have been defined in terms of contiguous towns or cities.

"A standard metropolitan area has been established and defined in connection with each city of 50,000 or more in 1950 in continental United States, its Territories, and possessions. Each area therefore contains one, and may contain more than one, city of 50,000 or more. When two cities of 50,000 or more are within 20 miles of one another they have ordinarily been included in the same standard metropolitan area. Standard metropolitan areas may lie in more than one State.

"Each standard metropolitan area has as a nucleus the county or counties containing the central city or cities. Contiguous counties are included in a standard metropolitan area when they qualify on two types of criteria. One type is concerned with the character of the county as a place of work for nonagricultural workers and with the density of population. The other type is concerned with the extent to which contiguous counties are socially and economically integrated with the central city. Specifically, these criteria are:

"1. The County must have—

a. 10,000 nonagricultural workers, or

b. 10 per cent of the nonagricultural workers in the standard metropolitan area, or

tion of the metropolitan boundary is made in some planning studies by including all contiguous areas that have at least one house per acre.

For practical reasons, this type of density measurement is often applied to a single city rather than a whole metropolitan area. In measuring city-wide density, all undeveloped vacant parcels and all parcels used primarily for farming are often excluded for some purposes, but included for others.

This type of density measurement is usually made in terms of persons per square mile or per acre. It gives a general impression as to the relative degree of concentration of population and urban land uses. When stated in terms of acres per 100 or 1,000 persons, it can be broken down to indicate the relationships between population and the area of land used for specific purposes such as residence, commerce, industry, streets, and other public and private uses. This type of measurement aids in comparing existing conditions among cities and metropolitan areas, and in relating such conditions to certain standards, estimated requirements, or norms that are useful for planning purposes.

Costs of public services, private utilities, intra-urban transport and of conducting many types of businesses involving distribution, collection, or movement of goods or persons in the urban area may be more or less affected by metropolitan and city-wide densities. In general, such services will be more expensive in low-density sprawling cities. Undue congestion in areas of excessively high densities, however, will also result in higher costs for some types of services. As in connection with all types of density, design and spatial pattern of land uses can affect greatly the cost of servicing and the living conditions of cities of the same over-all density. If places of work and shopping are not highly concentrated in the heart of the city but can be as efficiently operated if dispersed in convenient and appropriate subcenters, the cost and time

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- c. At least half of its population residing in contiguous minor civil divisions with a population density of 150 or more per square mile.
 - "2. Nonagricultural workers must constitute at least two-thirds of the total employed labor force of the county.
 - "3. There must be evidence of social and economic integration of the county with the central city as indicated by such criteria as the following:
 - a. 15 per cent or more of the workers residing in the contiguous county work in the county containing the largest city in the standard metropolitan area, or
 - b. 25 per cent or more of the persons working in the contiguous county reside in the county containing the largest city in the standard metropolitan area, or
 - c. An average of four or more telephone calls per subscriber per month from the contiguous county to the county containing the largest city in the standard metropolitan area.

"In New England, where the city and town rather than the county were used to define standard metropolitan areas, the first and second criteria set forth above could not be applied. In their place, a population density criterion of 150 or more persons per square mile, or 100 or more persons per square mile where strong integration was evident, has been used."

spent in reaching them may be considerably reduced. At the same time, congestion in the heart of the city may be relieved without the necessity of expensive street improvements and extensive downtown parking facilities.

COMMERCIAL AND INDUSTRIAL DENSITIES

The intensity of use of commercial, industrial, and other types of work places is analogous to floor density and lot density of residential buildings and sites. It may be measured in terms of ratio of floor space or building cubage to lot area or in terms of number of workers (day-time population) per acre of lot. Zoning ordinances, through height and coverage provisions, commonly control the maximum cubage of industrial and commercial buildings. To a certain extent, bulk regulation is an indirect limitation of the number of workers per acre. In some cities, fire regulations place limits on the maximum number of persons that may be accommodated in restaurants, theaters, and other places of assembly or places of work in order that available means of exit shall be adequate in an emergency.

Number of workers per acre is a particularly useful measure in planning industrial districts. It is less useful for commercial areas because the amount of street traffic generated in such districts is more closely related to the number of patrons of various stores, offices, and other businesses than to the number of employees.

CRITERIA FOR DETERMINING DENSITY AND PATTERNS OF URBAN DEVELOPMENT

In order that urban redevelopment may contribute most effectively to building healthful, convenient, and economically efficient communities, specific criteria for evaluating densities and urban patterns are essential. Some of these criteria, such as low cost of building construction and operation, of providing public services, or of "transfer" expenses of industrial and commercial firms can be considered primarily economic. Other criteria such as adequate light and ventilation, family privacy, and space for outdoor living and recreation can be considered primarily social. Still others such as convenience of access, adequacy of traffic and parking facilities, and location with regard to places of work, recreation, schools, and shopping have both social and economic aspects inextricably intermingled. For example, cost of travel to work can be measured in dollars and cents, but time and inconvenience of travel is extremely difficult to measure in exact monetary terms. At what rate per hour (if any) should the worker's time be evaluated as he rides on bus, streetcar, or in his own automobile? Can the time of the housewife

in reaching shopping facilities be measured in economic terms? To what extent is the worker's efficiency on the job, his health, or the harmony of his family and social relations affected by a long transit haul in crowded vehicles? Social and economic factors are present in lesser or greater degree in all criteria for evaluating densities and urban patterns.

Some of the social aspects are measurable with varying degrees of accuracy, as, for example, the distance that children will go to use a playground rather than use unequipped play opportunities closer to home, or the size of playgrounds to accommodate a specified number of children of specified ages. Other social aspects are less easily measured or are today almost impossible to measure, such as the effect on individual, family, and social health of different degrees of privacy and neighborliness as affected by varying amounts of space and varying designs within dwellings and in groups of dwellings.

Admittedly the line between economic and social considerations is extremely hard to draw in matters of this kind. The chief purpose of this monograph, however, is to outline types of analysis of various densities and patterns of development that can be made with some validity in monetary terms. This emphasis on economic efficiency does not imply that the economic criteria should be controlling in making decisions on density and design. Quite the contrary, the social aspects are often the more important. In fact, if any particular project or residential area does not meet social needs and demands, its economic efficiency is of little avail. The area that cannot compete in meeting human needs will also not be able, in the long run, to compete economically. This principle is well illustrated by the movement of families from high or medium density city areas characterized by smoke, dirt, noise, traffic hazards, and lack of sufficient open space and green areas to suburbs that offer better living environments.

Furthermore, such social standards must be not only those that are now acceptable, but also those that may be acceptable twenty, forty, or even sixty years hence. The relationship of present and expected future acceptable standards of living environment and financial soundness of investment are illustrated by some of the requirements and experience of the Federal Housing Administration in approving large-scale projects for mortgage guarantees.

Most of the apartment projects which have been approved by the Administration are either two or three stories in height. These projects have met with ready acceptance by tenants, especially families with children, partly because of the garden space they offer; but doubtless also because, in a low building, the tenant feels that he is living in the garden and not four stories above it. Low buildings are less expensive to construct and maintain than elevator structures, and a lower rental can be offered.

Every large city has certain areas in which a more intensive residential use is entirely appropriate. These are usually in the zone immediately surrounding the principal business district. They offer the convenience of ready access to work and amusement and many single persons or childless couples will prefer to live in them. There are also certain fashionable areas where those who prefer apartment living will favor high buildings, especially if they offer good outlooks, such as a view over a public park. These advantages create high commercial land values, but they are inherent in only a limited number of sites in any city. They cannot be created elsewhere by the mere device of permitting an equally intensive land use. Overdevelopment is a definite mortgage hazard. Projects are preferred which present a density of development consonant with the average existing development in good residential neighborhoods.

There is an insistent and increasing demand for green space in urban living, not in the form of a park, blocks away from the home, but surrounding and beautifying the home itself. Hence planting should be planned in conjunction with housing projects. As a rental asset, its advantages are obvious.⁷

ECONOMIC AND SOCIAL CRITERIA IN THEORY AND PRACTICE

The problem of making decisions that involve the relative importance of economic and social criteria is a difficult one, requiring broad outlook, mature judgment, and a sensitiveness in weighing the economic demands of business groups and of the social needs of families that differ as to family composition, income; and personal needs and desires. In theory, consumers' preference should be the criteria of judgment. Consumers express their preferences through the actual choices they make as reflected in the market and through consumer's surveys such as are frequently conducted by market research or similar methods. The consumer's preference as expressed in the market, however, is circumscribed by the variety, quality, and price of goods and services actually available to him. Surveys of consumer opinion are frequently misleading because the individual is not sufficiently familiar with all the possible choices, many of which may not be offered in the market in his locality or may be available for his inspection only in a very limited fashion. This difficulty is particularly great in regard to residential building types, neighborhood and urban patterns, where the individual consumer has lived in only a few of the possible environments and has limited or no experience with many of the newer types of urban development that are now found in a relatively few localities.

Thus, for better or worse, many of the decisions are made for the consumer by real estate operators, financial institutions, public officials, and interested civic groups. The decisions made by business groups are naturally made with emphasis on the economic factors, particularly the

7. Federal Housing Administration, *Architectural Planning and Procedure for Rental Housing* (Washington, 1939), p. 25.

expected profit margins. Business institutions making long-term investments are more likely to make decisions that favor the livability, convenience, and over-all economy, including operation and maintenance, of building development than those that try to make quick sales and take no further responsibility. Public officials may be inclined to give too much weight to immediate political pressures, from whatever quarters they may come. Civic groups are sometimes prone to emphasize social criteria, without due attention to the price tags attached to specific programs or projects. But, no matter what group or combination of groups makes decisions in the field of urban development, more or less "ivory tower" or top-level decisions by business executives or public officials, by their very nature, will not reflect actual consumer preference perfectly, and, in many cases, may do so very inaccurately.

Unfortunately, however, in our present society, urban development will be determined largely by such top-level decisions. The problem, then, is to provide the type of surveys and studies that will lead to decisions that are as closely in harmony with consumer preferences as possible. Furthermore, such studies of consumer preferences should consider conditions of not only today and tomorrow but also trends that may indicate probable conditions ten, twenty, thirty, and even forty or fifty years hence.

The problem of economic criteria is further complicated by the difficulty of developing an over-all accounting system for the total economy. With only rare exceptions, accounting systems evaluate only the cost factors within an individual firm or unit of operations. For example, the criteria for a business firm is, ideally, lowest cost of product but, more usually, highest profits. Efficiency of public services means lowest cost to the particular governmental unit operating a single public service or a group of public services. Efficiency for the housing consumer means lowest rent to the tenant or lowest total financing charges, operation, and maintenance costs to the home owner, plus lowest costs of transportation to places of work, shopping, education, recreation, and amusement. The problem of integrated accounting for all these types of efficiency is exceedingly complex and is discussed further in chapter iv.

In all cases, however, such efficiencies can be properly evaluated only as among possible patterns or densities of development that offer approximately similar levels of social desirability, including such factors as health, convenience, and amenities. The problem becomes much more complex when economic efficiencies are being compared among possible patterns that offer different levels of social desirability. Obviously, there is no easy solution to this problem. Such choices, however, are being and will continue to be made in one fashion or another.

CONSUMER PREFERENCES AND RESIDENTIAL COSTS

More specifically, in the field of residential densities and patterns, there is the problem of the gap between the spaciousness of living that different types of consumers want and the proportion of individual and national income that individuals and the community as a whole are willing to devote to obtaining a given degree of spaciousness. Traditionally the single-family house on its own lot is the dream of the American family. Recent surveys of consumers preference in housing indicate that the detached house on an ample lot is still the predominant desire.⁸ A study of the unincorporated areas of Milwaukee County, Wisconsin, indicated that more than half the families living on lots of forty feet or less in width considered them too small and that those on larger lots were generally better satisfied. However, a significant proportion of the families on lots of fifty to eighty feet in width would prefer even wider lots.⁹ Tenants in public housing projects also desire the more open types of development. In a carefully selected sample of one thousand families living in fifty-one public projects scattered throughout the country, 91 per cent favored houses, preferably of only one story. Among those living in apartments, 95 per cent wanted houses. This study concludes that "the arrangement that would accomplish almost universal tenant satisfaction is the home with individual front and back entrances, the individual walk, entrance and porch."¹⁰ Even in New York City, where apartment dwelling is commonly accepted, public housing tenants in row or group houses were generally better satisfied than those living in apartments.¹¹ Factors other than type of dwelling, however, influenced these opinions, since row house projects in New York are located in cleaner and less congested parts of the city. Furthermore, it must be realized that these samples included few, if any, families without children for whom apartment dwelling is generally more congenial.

Contrasted with this widespread desire for more spacious living is the pressing need to lessen housing costs, both public and private. Only a relatively small decrease in housing costs increases quite considerably the number of families who can afford new and better housing. Architects and planners are continually searching for more economical housing types and densities without unduly sacrificing desirable living con-

8. See *Forum Study of the Housing Market* (Architectural Forum, September, 1945), and *Urban Housing Survey* (Philadelphia: Curtis Publishing Co., 1945).

9. Richard S. Dewey, *Residential Development in the Unincorporated Areas of Milwaukee County, Wisconsin* (Milwaukee County Regional Planning Department, 1946), pp. 16-19.

10. Federal Public Housing Agency, National Housing Bulletin No. 28, *The Livability Problems of 1000 Families* (October 1, 1945), p. 5.

11. Women's City Club of New York, *Better Housing for the Family* (1948).

ditions. Too frequently the efficiencies that can be measured in dollars and cents are considered of greater benefit than conditions of livability that are less easily measurable in concrete terms. For example, in designing more efficient apartment plans, the space used for circulation in halls becomes squeezed into living-rooms and dinettes, which thus become passageways and lose some of their desirability for their primary function. Deeper and narrower rooms reduce the total length and cost of exterior walls but provide less daylight and poorer possibilities for desirable arrangement of furniture. In these and many similar types of cases, the architect and those responsible for approval of project plans must make decisions regarding the relative importance of efficiency and livability.

This same problem may well arise in connection with minimizing the cost of public services in residential areas. Since higher densities, up to a certain point, make for lower public service costs, undue emphasis on the efficiency factor could serve to re-enforce the pressure of the land speculator and building developer in overcrowding the land beyond the point where desirable living environment could be provided. Any theoretically lower cost to the consumer and taxpayer could easily be offset by resulting increases in land values. In theory, at least, the higher the actual or expected density for any type and rental level, the higher the land cost. The savings that might accrue to the community through the greater efficiency of public (and other) services might be more than offset by the higher rents that residents of specific areas would have to pay because of the higher land costs. The pressure of high land costs might result in inadequate provision of park, playground, and school space. For example, considering the high land values and lack of space in New York City, the Mayor's Committee of City Planning recommended a standard for athletic fields only half of that recommended by the Chicago Plan Commission and only one-seventh of that recommended by the National Recreation Association.¹² It is not implied that standards for recreation space should not vary from community to community, but the very low standards proposed for New York City suggest that social adequacy may be unduly sacrificed to the pressure of cost factors.

THE APPROACH OF THIS MONOGRAPH

The chief purpose of this monograph is not to establish the level of living environment that may be considered desirable from a social view-

12. Mayor's Committee of City Planning, *City Wide Studies* (New York, 1937), Vol. II (1940), p. 67. "Chicago Plans," *Pencil Points* (March, 1943), p. 57. National Recreation Association, *Standards for Neighborhood Recreation Areas and Facilities* (New York, 1943).

point. Rather it is to point the way toward determining the relative over-all costs of densities and patterns of development that offer various types and qualities of living environment. For example, for a given redevelopment site, many different densities and layouts are possible. In deciding upon the most desirable type of project, each of several promising designs should be evaluated in terms of the quality of the living environment in meeting the needs of the prospective population. In addition, to each design there should be attached a price tag that includes not only the costs of the housing itself but also the costs of providing public services. The final decision can then be made by balancing adequacy of design in meeting family needs against the over-all cost.

Another related type of problem is the relative emphasis to be placed on redevelopment of built-up areas and new building on outlying vacant tracts. Taking several types of projects offering good living environment at the lowest practicable rentals, the cost of providing public services in several possible locations in the urban area may be compared. This type of analysis also brings in additional considerations regarding the cost and convenience of reaching places of work, shopping, education, and recreation. If a considerable decentralization of industry and commerce is possible without undue loss of business efficiency, the time and cost of travel can be minimized. Such problems involve a great variety of complicated factors concerning the configuration of the entire urban area. Thus immediate decisions as to specific redevelopment programs should be made in the light of a more comprehensive understanding of problems involved in reshaping the entire urban community.

In its wider significance, this monograph may be useful in establishing more rational and efficient patterns of urban development and density for entire metropolitan areas. Sweeping generalizations, however, cannot be applied rigidly to all cities. Each city presents its own special conditions and needs and, to a considerable extent, must carry on its program of research applied to its particular circumstances. Nevertheless each city should find helpful the formulation of the general problem of efficiencies of various densities and patterns, as attempted in this monograph, the indication of relationships between various aspects of the problem, and the references to relevant research and experience.

The three following chapters discuss three specific aspects of the general problem. The first has to do with the efficiency of different types and densities of residential buildings as they relate to the costs of construction, operation, and maintenance of single-family, two-family, and group houses, and walk-up and elevator apartments of different heights. The next chapter deals with the relative cost of public services in resi-

dential areas and in cities of various sizes, densities, and patterns of development. It is in this field that perhaps the greatest immediate gains can be made in our understanding of urban efficiencies. The fourth chapter takes up the relation of residential and public service costs as affected by density, to the very difficult problem of efficiencies of industrial, commercial, and transportation functions in centralized or more disperse urban patterns, and the outlook for integrated research dealing with all types of private and public urban activities.

A fifth and final chapter has been included in view of the fact that redevelopment programs are now being initiated in many cities, and will be proceeding without the guidance of many of the needed economic studies discussed in this monograph. This last chapter is in the nature of practical advice with regard to densities and locations of initial redevelopment projects, based partly on the findings in the earlier chapters, partly on other social and economic considerations. This advice is in many respects not definitive because many of the needed studies have not and unfortunately will not be completed before decisions are made as to densities and locations of the earlier projects. The suggestions and comments in the final chapter are to be regarded as stop-gap formulations and inferences which are subject to clarification and revision as the types of comprehensive economic studies proposed in other chapters become available.

CHAPTER II

EFFICIENCIES OF RESIDENTIAL BUILDINGS AT VARIOUS DENSITIES

IN DISCUSSING the efficiency of urban development at various densities, it is well to consider first the basic units of land on which dwellings are located. In this chapter, therefore, attention is focused on the individual residential lot or housing project site. The problem of the effect of lot densities and building types on the total cost of housing paid by the consumer has been the subject of much research and deserves much further attention in the future. In spite of this research, however, the results have not been encouraging, either from the point of view of providing universally applicable conclusions or from the point of view of effecting a reduction in general housing costs.¹

EXISTING AND RECOMMENDED LOT DENSITIES

Population density on the lot or housing project site is composed of the first two types of density mentioned in the previous chapter: (1) floor or room density (persons per square foot of floor space or per room), and (2) the relation of floor space or number of rooms to the area of the lot. The combination of these two types of density yields a measurement in terms of number of persons (or dwellings) per lot area. By reducing the number of square feet of floor space per person or per room more "efficient" utilization of space is achieved, but such efficiency is always at the expense of spaciousness and beyond a certain point at the expense of basic livability. For example, in a group of eight public and private housing projects in New York City studied by the New York City Housing Authority, the rentable floor space per person varied from 168 square feet per person in South Jamaica Houses to 258 square feet per person in Knickerbocker Village.² For more spacious

1. It appears that since 1921 the real costs of housing, when compared with the general price level, have not been reduced and may actually have increased. See National Housing Agency, *Housing Costs*, National Housing Bulletin 2 (Washington, December, 1944), p. 9.

2. See New York City Housing Authority, *Construction Cost Analysis* (1945). A more detailed method of measurement considers number of persons per room and square feet of floor space per room. The following figures may be of interest, bearing on this type of analysis. In 1940, in all cities in the United States, the median number of persons per

private housing, particularly in single-family dwellings, there may be 500 square feet of floor space per person or even more.

A reasonably livable average density for families of three persons or more, provided there is good design and efficient utilization of space, is between 200 and 300 square feet of gross floor area per person.³ For one- and two-person families, floor densities of 400 square feet or more per person may be desirable. Since the cost of the building normally represents between 80 and 90 per cent of the combined cost of the building and the lot (including improvements), small variations in floor density can greatly affect the total housing cost per person.⁴

In comparison with floor density, lot density may vary within much wider limits, depending on the type and spacing of buildings. For example, a single-family dwelling for four persons on a lot 60 feet by 120 feet has a net lot density of 25 persons per acre. On the other hand, recently built eleven- to thirteen-story public housing projects in New York City have densities of 500 persons or more per net acre, and densities in private apartments in crowded parts of New York frequently average as high as 750 persons per net acre or more. In fact, the average density on all residential lots in Manhattan was 569 persons per net acre in 1940. No other American city has such high over-all lot densities as Manhattan Island; but cities such as Boston, Chicago, and St. room was 0.68 in all occupied dwelling units and 0.73 in tenant-occupied dwelling units. Statistics for the various boroughs of New York City show a variation of from 0.66 in Richmond to 0.83 in Bronx. The room density in low- and medium-rent housing varies considerably, the larger households generally having a greater room density. In New York City, most public projects have between 0.9 and 1.0 persons per room. Limited dividend projects vary from .66 to 1.17 persons per room, with a median of 0.93 persons per room. The number of square feet of floor area per room (including nonrentable area in stairs, hall, etc.) is about 160 in the New York City public projects built in the late 1930's, and about 175 in recent postwar projects. (Such an increase, by itself, may reflect either more spaciousness or fewer bedrooms per dwelling unit. Re the latter, the area of living-rooms, ordinarily the largest room in a unit, will pull up the average room size more in a one-bedroom unit than in a three-bedroom unit.) In fourteen limited dividend projects in New York City, the average number of square feet of gross floor area per room is 250 with a range of 163 to 315. Data from New York City Housing Authority and New York State Board of Housing given in Henry S. Churchill and William H. Ludlow, *Densities in New York City* (New York: Citizens' Housing and Planning Council of New York, 1944), pp. 27, 28, 79, 90.

3. In Great Britain and Sweden, *Minimum* requirements for four-person families are very close to 200 square feet of floor space per person. Slightly more floor space per person is required for smaller families and slightly less floor space per person for larger families. See Great Britain Ministry of Health, *Design of Dwellings* (Dudley Report), 1944, pp. 33-40, and Donald and Astrid Monson, "Report on Sweden," *Journal of the American Institute of Planners*, XV, (Summer, 1949) 34.

4. For experience in the 1920's, see Gries and Taylor, *How To Own Your Home* (Division of Building and Housing, United States Department of Commerce) p. 12. For FHA experience in the 1930's see National Housing Agency, *op. cit.*, p. 45. For a group of large-scale projects built in New York City, the land cost varied from 8 per cent to 33 per cent of the total cost of land and buildings. See James Ford, *Slums and Housing* (Cambridge: Harvard University Press, 1936), p. 783.

Louis approach Manhattan lot densities in their most crowded sections.⁵ With reasonably good standards of floor density and space around buildings, lot densities for thirteen-story apartment buildings may run as high as 350 persons per net acre.⁶ The mention of such high lot densities is not intended to imply that any more than a small proportion of our large cities should be built in thirteen-story buildings, but only to indicate the range in appropriate lot densities from detached houses to tall elevator apartments.

DETERMINATION OF HOUSING COSTS

Disregarding questions of the desirability of apartments versus detached or group houses for different types of families, this chapter summarizes the results of various studies indicating the comparative costs to the tenant (or home owner) of various types and densities of residential development. Ideally such costs should include not only the costs of building construction, land, and improvements normally borne by the tenant, but also all operating and maintenance charges that are included in rent. Although some studies include operating costs, many unfortunately omit them.

Many difficulties surround the comparison of housing costs. In the first place, standards of comparison may be made on the basis of costs per family, costs per room, costs per cubic foot, costs per person, or costs per square foot of total floor space, of rentable floor space, or of usable floor space (excluding halls, stairs, and sometimes baths and closets). Not only are there great differences in the livability of various designs, but also in the quality of construction and the inclusion of more or less luxury gadgets or appointments. Building codes, local building practices, and the efficiency of builders in constructing the types of buildings most common to the locality introduce variations among different cities. If buildings already constructed are to be compared, private builders are often loathe to disclose their actual costs as distinguished from selling prices or costs reported when obtaining building permits. If estimated costs of buildings not yet built are to be compared, there is always the danger that actual costs may vary considerably from estimates.

Furthermore, building costs rise and fall over periods of time and

5. Churchill and Ludlow, *op. cit.*, pp. 29, 80, 83, 90, 100, 101.

6. Computed from American Public Health Association, Committee on the Hygiene of Housing, *Planning the Neighborhood* (Chicago: Public Administration Service, 1948), p. 38. See also Churchill and Ludlow, *op. cit.*, pp. 79-91. Assuming street area at 30 per cent of the combined area of streets and lots, 350 persons per net acre is equivalent to 250 persons per gross residential acre (not including community facilities) or 75,000 persons per square mile, including neighborhood community facilities.

the relative cost of different materials used in different types of structures does not vary uniformly. The costs of lumber, roofing, steel, concrete, and bricks, for example, do not all rise and fall in the same proportion, and price changes in each vary considerably from one locality to another. Similarly, wage rates for various types of skilled and unskilled labor vary locally and over a period of time. The use of new materials or new types of construction, including greater or less degrees of prefabrication, may change building costs considerably in the future, although few very significant reductions in cost have been accomplished to date by these methods.

Finally the type, level, and costs of operation and maintenance vary greatly among buildings, among localities, and among different periods of time. For example, apartments require janitor service and maintenance of public halls, stairs, and grounds, while in houses these services are generally performed by the occupants.

DETACHED, SEMIDETACHED, AND ROW HOUSES

In Appendix A are a number of tables and explanatory notes summarizing the results of several significant studies of the comparative costs of housing of different types and densities. In these studies the difficulties mentioned above have been overcome with greater or less success.⁷ Consequently it is possible to draw some qualified conclusions from them and from other available sources.

In general, the row house or row flat⁸ offers the lowest cost housing.⁹ Compared with the detached or semidetached house, the row house offers greater economy of land, of street and utility improvements, and of construction materials because of fewer end walls, etc. Having less

7. Many of these studies, as well as those summarized or referred to in other chapters of this monograph, were done before the postwar inflation in prices. Although this adds to the difficulties of using them intelligently and limits their application in some ways, it does not make them useless. The important consideration for most purposes of this discussion is not the *absolute level* of the various costs but the *relations* among them. Of course, the unfortunate postwar inflation has disturbed some of these relations but quite probably it has not affected them as much as it has upped the general level. At all events, these are the best studies now available and some analysis of them may indicate ways and means not only of bringing them up to date but also of extending their range and improving their quality.

This warning on pre- and postinflation cost figures simply illustrates one of the many difficulties in the use of such studies that were pointed out in preceding pages.

8. Row flats are distinguished from two-story apartments in that each row flat has its own private entrance from the ground level and all dwelling units may have private yards, thus eliminating janitorial and upkeep expense for common stairs, halls, and yards.

9. Economy of row flats over row houses is obtained by fewer stairs and chimneys, but living conditions are less desirable than in row houses because of more noise particularly in first floor flats and less convenient access to and arrangement of yards particularly for second story flats. For cost comparison of row houses and row flats see Appendix Tables A-3, A-4, and A-5.

ground and less exterior wall, upkeep and heating expense are generally less for row houses.

One indication of the differential in costs between row, semidetached, and detached houses on different-sized lots is presented in Appendix Table A-4, based on data from a study prepared in 1932 for the President's Conference on Home Building and Home Ownership. Assuming six-room brick dwellings of similar design and construction, this comparison indicates that when land costs are very low, row houses on 20-foot lots are one-third less expensive than detached houses on 60-foot lots and one-fifth less expensive than semidetached houses on 40-foot lots. With higher land costs, the row house is in even a more favorable position.¹⁰ Clarence Stein reports that row houses built in the Chatham Village development in Pittsburgh cost about \$10,000 per dwelling unit instead of \$12,000 for comparable detached houses.¹¹ Part of the savings was due to more efficient use of site improvements. Studies of various federal housing agencies and data from many other sources support these general conclusions that row housing offers considerable economies over detached or semidetached houses.

APARTMENT BUILDINGS

Valid cost comparisons between houses and apartments and between apartment buildings of different heights and densities are extremely difficult to make. Miles Colean, after wide experience and considerable study, has summarized the cost problems of apartment buildings as follows:

The place of the flat or the apartment in the stock of housing is a subject of unending controversy incited by a lack of cost data. Apartments must usually be constructed with a larger proportion of heavy and fire-resistant materials than the detached or row houses. They usually have certain public spaces—stairs, halls and lobbies—to be heated and cared for by the landlord. In addition, the services of the landlord for grounds maintenance, garbage collection, and minor repairs will be increased. These items tend to increase both original and maintenance costs. On the other hand, the apartment is economical in the use of land and in improvements and undoubtedly offers the most economical means of producing very small dwelling units and of accommodating families demanding considerable service.

The most economical size of apartment building depends almost entirely on the

10. See Appendix Table A-4. The cost of land improvements used in this comparison, including minor streets, sewers, yard grading, etc., is about \$30 per front foot as compared with costs of \$4.00 to \$9.00 per front foot reported by the FHA in 1941. See Twentieth Century Fund, *American Housing* (New York; The Fund, 1944), pp. 350-51. At \$7.00 instead of \$30 per front foot improvement costs, the row house would be 28 per cent instead of 34 per cent less expensive than the detached house, with raw land cost at 10 cents per square foot in both cases.

11. Clarence S. Stein, "Toward New Towns for America," *Town Planning Review*, XX (October, 1949), 252-58.

cost of maintenance and the risks of vacancy. Experience seems to indicate that the two- to four-unit, or even six-unit building is an uneconomical structure to maintain unless operated by a resident landlord who performs most of the service himself. But a continued vacancy of even one unit may mean the difference between profit and financial disaster. Apartment buildings of from six to twelve units are often even more dubious ventures since these are too large for resident landlord maintenance, without being large enough for adequate paid service, and they still carry a high vacancy risk. It is questionable whether any apartment structure or group under fifty units provides a proper balance between risk and servicing cost. . . .

The question of height in apartment buildings is still a subject of debate. The prime excuse for high buildings has been high land costs. It may be argued, however, that because of their increased earning power, high buildings have been a principal cause of high land costs. In any case, with the wide choice of outlying acreage available it is doubtful whether land so expensive as to demand multi-storied structures need now be used, except where other considerations enter the picture.

The tall building offers some economy in plumbing and heating lines. Where building codes do not greatly differentiate between high and low buildings in their specifications for wall construction, degree of fireproofing, or number of stairs, this saving may tip the balance in favor of the tall building. The latter also allows for concentration and economy in service and because of its occupant density usually involves less ground maintenance per unit.

The question of optimum height is equally debatable. If elevators as well as all the usual fire protection are necessary, the four- to six-story building probably does not achieve maximum economy. The six-story building is popular in New York City because nonfireproof floor construction is allowed up to that height. In other places the differential between the height of walk-up and elevator buildings is usually greater. The Parkchester (New York City) development of the Metropolitan Life Insurance Company varies from nine to thirteen stories, but little evidence can be found that the one height is more economical than the other. Today twelve-story apartments are being built in New York City and occasionally elsewhere, but pueblos of twenty stories or more are now rarely constructed.

In the absence of definite data, judgment of the most economical height must rest upon observable trends. Today the trend appears to favor the low walk-up building; and, outside New York City, the elevator building has become a rarity. Despite the fact that the New York City Housing Authority has built elevator buildings and has advanced claims for their economy, it appears doubtful that the high structure can satisfy much of the country's housing needs, particularly in the low-cost field. Except where artificial barriers like restricted location, expensive land, or excessive code requirements exist, the walk-up type seems most economical.

The low apartment building shares with the detached and row house great possibilities of simplified and standardized arrangement. There is little choice among them on this score alone. In fact, it is possible, as several prefabricators have shown, to design units that serve equally well as detached houses, row houses, or apartments.¹²

Considerable discussion of the problem of housing costs for buildings of various heights is included in James Ford's two-volume work, *Slums*

12. Twentieth Century Fund, *op. cit.*, pp. 56-58.

and Housing. Referring particularly to New York City, the following observation is of interest:

Experienced contractors have submitted the opinion that, within the range of four to twelve stories, there would be little difference in the unit costs of low-cost housing structures of similar design and equipment. Walls must be somewhat thicker if height is carried beyond a certain point, columns larger, and elevator ropes longer, with each additional story. But on the other hand, the cost of excavation, roof, and elevators are spread over a larger cube; faster hoists can be used for conveying materials, thus compensating for greater carrying distances during construction; and other methods are devised to keep costs down.¹³

The difficulty of making cost comparisons between apartment buildings that have actually been constructed is well illustrated by the New York City Housing Authority report, *Construction Cost Analysis*, which compares three public, three limited-dividend, and two private large-scale low-rent projects in the New York area. These projects were presumably selected to be as nearly comparable as possible. The report concludes:

The over-all merits of a project, in any study of construction costs, are most simply judged by the achievements in economy, privacy, space provided and safety. The projects chosen for comparison were all efficiently and economically constructed, but they emphasized these aforementioned aspects in varying degrees. . . . It can thus be seen that no one project can be picked out as meeting all these standards best or as having produced all standards most cheaply, and it is for this reason that no over-all comparison has been attempted. The committee cannot discover a mathematical pattern which would relate the merits of facilities provided to the cost of producing them. . . .¹⁴

Because of these difficulties, comparisons based on theoretical studies of buildings of comparable design and construction seem to be more accurate, although perhaps less fruitful, due to the fact that the many assumptions on which they are based are rarely encountered in the same way when facing practical building problems. It must be constantly borne in mind that such theoretical studies are generally based on only one set (or a very limited number) of assumptions regarding density, design, first cost, interest, amortization, and cost of operation and maintenance. Each of these factors is subject to wide variation under conditions surrounding the launching of individual projects; and the factors vary independently. Each estimator generally selects assumptions that seem reasonable at the time and in the city where he is located. But his conclusions may not be applied at other times and in other localities unless proper adjustments are made.

One such theoretical study made under the direction of Frederick L. Ackerman and W. P. R. Ballard compared a great variety of site plans

13. James Ford, *op. cit.*, p. 812. See also pp. 771-821.

14. New York City Housing Authority, *Construction Cost Analysis* (1945), p. 11.

for similar three- to six-story fireproof buildings ranging in density from 100 to 250 persons per gross acre. All relevant costs of construction, maintenance, and operation were included, except site costs. Although the relatively open site plans at 100 persons per gross acre show rather higher costs, rentals decline only slightly for the most efficient plans in the density range from 125 to 250 persons per gross acre. The slightly less efficient plans at the higher densities produce rentals nearly similar to those of the more efficient designs at the lower densities.¹⁵

This general conclusion that very high densities do not greatly decrease rentals *when land costs are excluded* is borne out by a 1934 report of the Housing Study Guild of New York. Omitting land cost, but including all costs of construction, maintenance, and operation, this study compared fireproof buildings of from two to twelve stories in height. The lowest rentals were recorded for four-story walk-ups, but six- and twelve-story elevator apartments had only slightly higher rentals. Whereas two- and three-story walk-ups had the highest rentals, two-story flats not requiring janitor service achieved rentals similar to those of the six- and twelve-story buildings.¹⁶ If the four-story walk-up is eliminated from consideration because of the undesirability of climbing three flights of stairs, and if even relatively low land costs are included, the twelve-story building, because of its higher density, would undoubtedly be the least expensive. The experience of the New York City Housing Authority bears out this conclusion as far as it applies to New York City. Recent studies comparing the costs of three-story walk-ups and tall elevator apartments by Michael Reese Hospital¹⁷ in Chicago and the San Francisco City Planning Commission¹⁸ come to similar conclusions in favor of the tall elevator apartment. It must be emphasized, however, that these New York, Chicago, and San Francisco studies assumed fully fireproof construction for low as well as high buildings.

RESIDENTIAL STRUCTURES OF DIFFERENT TYPES OF CONSTRUCTION

The two preceding sections have dealt separately with the comparative costs of houses of different types and the costs of apartment build-

15. New York City Housing Authority, *A Note on Site and Unit Planning* (1937).

16. See Appendix Table A-5.

17. Michael Reese Hospital, *A Proposed Housing Program* (Chicago, 1946), pp. 24-25. Construction cost per apartment is estimated at \$6,187 for the sixteen-story building and \$7,578 for the three-story building. Operating expense is nearly the same for both types of buildings.

18. San Francisco City Planning Commission, *Western Addition District Redevelopment Study* (November 1947), p. 43. For fuller explanation, particularly in regard to the effect of local building regulations, see Appendix I, p. 32.

ings of varying height. Valid comparisons between houses and apartments are complicated not only by the quite different type of dwelling accommodations provided, but also by the different types of construction required. Whereas structural and fire safety will necessitate heavy steel frames and complete fireproofing for tall elevator apartments, light wooden frames are adequate for one-story detached dwellings on large lots. Between these two extremes of density, varying degrees of structural strength and fire resistance are necessary. Several studies comparing different structural types of residence buildings have been examined.

One such study comparing the costs of one- and two-story brick houses with semi-fireproof three-story and fireproof six- and twelve-story apartments concludes:

It will be noted that per unit costs do not greatly vary as the type of building is changed. The principal difference comes between the group of very low buildings and the group of multistory buildings. It is estimated that the former, taking advantage of the lighter forms of construction usually permitted for them and simpler methods of handling materials during construction, will, without sacrifice of essential standards, be less costly than high buildings. High buildings, however, frequently show savings in the mechanical work which offset much of the supposed difference between them and non-elevator structures. Except in areas, as has been true in New York City, where a six- or eight-story building may embody lighter construction than a higher building, the difference between various multistory types would be negligible. Under certain building codes, it might even be shown that *on the basis of equal density* the twelve-story building would be comparable in unit cost to a three-story building.¹⁹

Another indication of the cost relationship between low frame and brick houses and apartments and tall fireproof elevator buildings is given in Appendix Table A-1, based on estimated replacement costs of residence buildings per square foot of gross floor space, computed from Boeckh's *Manual of Appraisals*.²⁰ According to these figures, frame or brick row houses are the least expensive to build. Three-story brick walk-ups with wooden joist floors are slightly less expensive than the taller fire-resistant elevator apartments, but with the inclusion of land and site improvement costs, the balance could very easily be tipped in favor of the thirteen-story elevator building.²¹ Although these costs are based on 1926-29 averages for the United States, by the use of Boeckh's indices they can be brought up-to-date and applied to present conditions in any desired city in the United States. Such easily pre-

19. Miles L. Colean and Arthur P. Davis, *Cost Measurement in Urban Redevelopment* (New York: National Committee on Housing, Inc., 1945).

20. For less detailed comparisons, see also J. M. Cleminshaw Co., *Appraiser's Manual* (Cleveland, 1947).

21. Similar conclusions can be drawn from building cost data for New York City, 1933. See Appendix Table A-2.

pared figures might be useful for quick preliminary comparisons, but should be used with great caution because the methods by which they have been computed are not fully revealed.

To obtain more accurate comparisons, detailed studies must be carried out in each city for the types of construction and design considered suitable for local housing needs and according to local building regulations.²² Where building codes demand excessively fire-resistant construction or costly requirements in regard to fire exits for low buildings, revisions would seem to be in order to give the consumer the benefit of the lowest cost construction consistent with reasonable safety precautions. In fact such revisions are called for in Title I of the Federal Housing Act of 1949, which prescribes that, in approval of redevelopment projects for federal assistance,

. . . the Administrator shall give consideration to the extent to which appropriate local public bodies have undertaken positive programs for encouraging housing cost reductions through the adoption, improvement, and modernization of building and other local codes and regulations so as to permit the use of appropriate new materials, techniques, and methods in land and residential planning, design and construction, the increase of efficiency in residential construction, and the elimination of restrictive practices which unnecessarily increase housing costs. . . .²³

The analysis of residential costs thus far has been concerned with the comparative costs of construction, operation, and maintenance of detached or semidetached group houses, and apartments of varying height. The fact that quite different types of construction are appropriate for different structural types of houses and apartments has been emphasized. Little has been said, however, regarding the cost implications of varying densities for the same type of structures or for structures of different types.²⁴ At this point land cost, including the cost of land improvements such as streets and utilities, becomes extremely significant.

LAND COST

As suggested at a number of points in the foregoing discussion, land cost is very often the major factor in determining the most efficient lot or project density. Density in turn establishes to a large extent the

22. One such study for a proposed project in Los Angeles indicates that the gross cost for five- to seven-room nonfireproof row houses is somewhat less than that for three-and-one-half room apartments in fireproof seven-story buildings. On a per room basis, the row houses are 42 per cent less expensive than the seven-story apartments and 33 per cent less expensive than five-room apartments in three- and four-story nonfireproof buildings on hillside sites. For details see Appendix Table A-6.

23. Housing Act of 1949, Title I, Sec. 101.

24. The implications of different densities in regard to openness and amenities are, of course, also important.

most appropriate type or types of structures. Data prepared by the New York State Board of Housing, comparing six-story apartments at different densities and land costs, points up some very significant relationships.²⁵ According to these figures, when land is available at \$.75 per square foot, a doubling of density results in a reduction of rentals by only \$.34 per room per month, whereas with land at \$6.00 per square foot, doubling of density decreases rentals by \$2.68 per room per month. Thus, high land costs exert a very strong pressure to increase densities. In most localities, however, residential land costs will seldom if ever reach the higher levels included in this New York study.

The paramount importance of land cost is brought out by a careful study, by Miles L. Colean and Arthur P. Davis, that compares detached and row houses and three-, six- and twelve-story elevator buildings with land coverage kept close to 25 per cent, except for lower figures for the detached and row houses.²⁶ This report, which seems to have received too little attention even among technicians, contains many charts and tables indicating the differences in rentals for each type of building under a wide variety of assumptions as to land costs, financial charges, and real estate taxes. Because of its great significance both in regard to methodology and results, this report deserves careful scrutiny by agencies concerned with redevelopment. Speaking of the decisions made by private developers, before present forms of redevelopment aid were available, the report concludes:

A careful consideration of the figures will be convincing that, barring drastic reductions in building or operating costs, land cost is the most critical element not only in rent, but in the selection of building type and the number of families per acre to be accommodated.

Interest rates, for instance, are not flexible under any given set of circumstances. While some variation in over-all rates may be accomplished by changing the period for amortization, or by changing the financial pattern from one of an equity-mortgage combination to one of institutional ownership, probably no reduction from say an over-all rate of close to 6 per cent may be contemplated without special benefits of some form, such as the use of government funds, which ignores the special risk factors in real estate investment, or tax exempt securities, or some method of guaranteeing the return on investment.

Real estate taxes, similarly, are not subject to marked variations within short periods except by such devices as the tax subsidy common with public housing operations or the tax "freezing" permitted by the New York redevelopment laws.*

The result of these relative inflexibilities—and to them must be added building

25. See Appendix Table A-7.

26. Colean and Davis, *op. cit.*

* Colean-Davis footnote: "The effect of taxes, as with land, may of course often be changed by a change in location. To the attraction of lower land cost usually offered by the suburban community is thus often added the inducement of lower taxes."

costs which can be materially altered only in time—is that the cost of land becomes the paramount consideration.

Where land is available at low prices, even up to as much as 50 to 75 cents a square foot, a choice of building types may usually be made on the basis of what is desirable for the class of tenancy contemplated.† Below this limit, not only the lowest rentals, but the most attractive rate of return at a given rental is obtained in the types of buildings, which call for the lowest densities.‡ Above about one dollar per square foot, however, except where relatively high rentals may be obtained, choice is rapidly eliminated, and the balance falls more and more heavily in favor of multistory structures, whether or not they are the most suitable sort of housing for the families that will occupy them.§

The resort to multistory buildings at correspondingly high densities, however, only partially solves the land cost problem. These building types are generally more costly than lower structures, and the rentals obtainable in them are rarely as low as those possible, for instance, at a low land cost in houses or walk-up apartments. However, the two-story row or group house, generally the most economical type of property for practicable rental operation, fades from consideration as land costs advance.

The possibilities of rebuilding the older areas of our cities are thus closely tied to the cost of land in those areas. It is, of course, true that certain favored areas may be successfully redeveloped with land costs of \$3.00 per square foot or more. *But these areas are likely to be few and the quantity of such housing that the market can sustain relatively small.* Even with the tax freezing device permitted by the New York laws, the amount of rebuilding that will be possible in a large part of the older areas of Manhattan, must be limited to families who will be satisfied to live in multistory structures at rents which, considering the market as a whole, are relatively high.

The freezing of taxes as they were before redevelopment, while permitting rents in the new project to be much less than they would be under full taxes, does not permit a lowering of density unless some of that rental saving is reabsorbed, because the high land cost still figures in the financing charges of the project. For the same reason, where public housing projects are erected on high priced land, even the full subsidies granted by government cannot eliminate the necessity for multistory structures and high densities, in order to reach down to the required scale of rentals.

One aspect of this situation is that, even at the extreme of land price, density increases of 100 per cent will permit rentals to be reduced only between 10 and 20 per cent, or at a given rental will only slightly increase the over-all rate of return. The price of increasing density, necessary as at times it may be, is indeed a heavy one. It is a heavy one not only for the individual project and for the families that will occupy it but for the community as a whole, since a general acceptance of the high densities customary in multi-story buildings would preempt the market for a

† Colean-Davis footnote: See Figure 6, on which is shown, by the crossing of the lines representing the building types, the point where land price indicates an advantage in shifting from one type to another.

‡ Colean-Davis footnote: See Figure 7 for an example at a selected rental of \$13.00 per room.

§ Colean-Davis footnote: The effective land cost per room could, of course, be lowered by a system under which the local government paid for and maintained public spaces in connection with the buildings, thus justifying a denser use of the land upon which the buildings actually were placed.

relatively small number of developments utilizing a relatively small proportion of the city's land.

The figures show the range of land cost possible for those types of buildings that are best adapted to the general housing need because they are most suited to normal family life and, moreover, are most susceptible to further savings in building and operating costs. In order to find land within that range, it is usually necessary to go to outlying districts or to independent suburban communities where not only is land cheap but where in addition, taxes are likely to be lower.

The cost of land within the central city, thus tends at once to greater concentration and to greater dispersion. The push behind the decentralization of cities is a push for space and economy. The pull of the central city is for convenience and saving of time and travel. For the present, the push greatly exceeds the pull; and it is land cost and taxes that tip the balance.²⁷

The question of land costs and their effect on rentals in buildings of different types, heights, and lot densities takes on special significance under urban redevelopment procedures. By writing down the land cost to any desired level, the redevelopment agency can provide the economic setting necessary for profitable operation of the type and density of housing appropriate to the location within the city and to the families to be housed. William H. Ludlow has suggested that, in order to obtain desirable and efficient densities for multi-story apartments, land costs to the developer should be not more than \$1.00 to \$2.00 per square foot. For two-story row houses or garden apartments, a maximum land cost of 50 to 70 cents per square foot is required, with even lower costs for detached houses.²⁸ These conclusions, as well as those of Colean and Davis quoted above, may be subject to some upward revision because of the general increase in price levels from 1945 to 1949.

The extent to which land costs should be written off at the public expense raises important questions of public policy. Whereas the developer seeks the lowest possible land cost, the greater the write-off, the less redevelopment can be accomplished per dollar of public capital grants.²⁹ Although land cost to the developer should be low enough to attract private investment capital to projects of desirable density for the particular site and class of tenants to be housed, they should not be so low as to offer extremely high profit opportunities as compared with other possible sites where no write-off of land costs would be involved. In other words, the land cost should be based on the "economic rent" or "use value" for the land.

"Use value," although a simple concept, is not easily determined with precision for any specific project. In theory, it depends on the total in-

27. Colean and Davis, *op. cit.*, pp. 12-13.

28. William H. Ludlow, "Land Values and Density Standards in Urban Redevelopment" *Journal of the American Institute of Planners* (Oct., Nov., Dec., 1945), p. 9.

29. This type of problem involving combined public and private costs is discussed more fully in chapter iv.

come that can be expected from the developed site, less all operation and maintenance expenses, taxes, and a reasonable rate of interest and of amortization or depreciation on the capital invested in the structures. The remainder represents income from the land itself, which can be converted into capital value at what is considered a "reasonable" rate of interest—reasonable, that is, in light of returns available in other enterprises of comparable risk. To compute use value, it is first necessary to determine the desired type and density of the structures on the basis of social criteria and those economic factors other than land cost. Then, for residential structures, the financing charges and all operating expenses can be determined. In addition, the required rental must include a charge for the land. The proportion of this land charge to total rent depends largely on the customary or "normal" proportion in the local real estate market. As pointed out at the beginning of this chapter, land cost for residential buildings in many cities normally represents 10 to 20 per cent of the total cost of land and buildings, or 5 to 10 per cent of the total rent. Considerable variations from these proportions often occur, however, with more recent building projects tending to have lower land values in proportion to total cost.³⁰

CONCLUSION

The foregoing discussion appears to justify a tentative ranking of dwelling types in order of lowest to highest over-all cost to the consumer, assuming efficient and desirable standards of density,³¹ design, construction and operation, very low raw land costs, and full improvements provided by the developer. It must be emphasized, however, that the following ranking will not hold for dwellings of all sizes and that the relationships may vary considerably under different sets of assumptions. Nor is the factor of the relative desirability of one type over another for different family compositions and needs considered.

TENTATIVE RANKING OF DWELLING TYPES FROM LOWEST TO HIGHEST OVER-ALL COST TO THE CONSUMER (Assuming low land costs)

1. Row flats
2. Row houses
3. Semidetached houses
4. Detached houses

30. Average land cost (including site improvements) of rental housing projects with Federal Housing Administration mortgage guarantees was approximately 10 per cent of total development cost in 1948. See Second Annual Report of the Housing and Home Finance Agency, Washington, D.C., 1948, pp. 231-33.

31. For appropriate density standards, see American Public Health Association, *op. cit.*, —, — n. 6.

5. Three-story semifireproof walk-up apartments³²
6. Tall fireproof elevator apartments³³

This tentative ranking must be qualified by many "ifs" and "buts" and should not be applied to any particular project or city without careful consideration of many local factors. For example, in some localities it has been found that walk-up apartment buildings can have lower over-all costs than detached houses. A recent study by an outstanding architectural firm comparing one-story detached houses and two-story apartments with the same floor area per dwelling estimated somewhat lower rentals for the apartment buildings. In this analysis, the janitorial expense for the apartments was more than offset by higher heating and construction costs for the one-story houses. Differences in climate, local codes, and many other factors influencing the type, density, and operating expense of residential buildings will affect comparative costs considerably. Quite obviously, on higher cost land higher densities will produce lower rentals when other factors remain the same.

The foregoing discussion points clearly to the need for careful and perhaps rather extended comparative studies by each community, assuming a variety of building types and densities on several possible sites. Each community must consider its own particular conditions in regard to housing needs and market, existing and desirable densities and building types, land, construction and operating costs, financing arrangements, taxes, and other varying factors.³⁴ Although several variations in each of a great many factors must be considered, the computation will not be very much more than in considering only a few possible variations. Once the basic formulas have been worked out, the substitution of several different values for each component involves only routine calculations.

A number of basic formulas for such calculations have been worked out. Attention is particularly directed to the formulas developed in the previously mentioned Colean and Davis report. Various other methods and formulas that might be used by an individual community are included in James Ford's *Slums and Housing*,³⁵ and in an article in the *Architectural Forum* for September, 1937, entitled "From Costs to Rents to Building."

32. Two-story apartments are less economical than three-story apartments, but sufficient data are not available to compare them with tall elevator buildings.

33. At very low land costs, there is apparently little difference between six-story and twelve-story heights. As land costs increase, the twelve-story height becomes less costly.

34. One competent planner has made the following interesting observation: "My personal experience in various countries seems to indicate that in every locality the locally dominant [housing] type is most economical, because the building industry, the building and zoning regulations, the street layout, etc., are geared to it" (Letter from Hans Blumfeld, Philadelphia City Planning Commission, July 1, 1949).

35. See pp. 786-96.

Finally, it must be kept in mind that the costs to the private developer, or the housing costs paid by the tenant or home owner, are only a part of the picture. The little explored subject of costs of public services and of wider efficiencies involving decentralization and regrouping of commercial and industrial establishments in the urban land pattern are discussed in the following chapters.

APPENDIX A

TABLES AND NOTES ON COMPARATIVE COSTS OF RESIDENTIAL BUILDINGS OF VARIOUS TYPES, DENSITIES, AND CONSTRUCTION STANDARDS

TABLE A-1

REPLACEMENT COSTS OF RESIDENCE BUILDINGS OF VARIOUS TYPES
(1926-29 United States average costs, "good" construction)*

	NUMBER OF STORIES	HEIGHT IN FEET		COST PER CUBIC FOOT			COST PER SQUARE FOOT OF FLOOR SPACE		
		Total†	Per Story	Frame	Brick‡	Fire Re- sistive§	Frame	Brick‡	Fire Re- sistive§
Houses									
Detached..	{1	21	21	\$3.07	\$3.42	\$3.79	\$6.45	\$7.15	\$7.96
	{2	30	15	3.74	4.38	6.43	5.61	6.57	9.65
Two- family...	{1	21	21	2.74	3.01	—	5.75	6.30	—
	{2	30	15	3.78	4.25	—	5.67	6.38	—
Four- family...	2	30	15	3.16	3.71	—	4.74	5.57	—
Row.....	2	30	15	3.60	3.83	—	5.40	5.75	—
Apartments									
Walk-up...	2	32	16	—	4.48	5.15	{—	7.17	8.24
	3	42	14				{—	6.27	7.21
Elevator...	4	52	13	—	4.94	5.63	{—	6.42	7.32
	6	72	12				{—	5.93	6.76
	7	82	11.7				{—	(6.05)	7.01
	13	142	10.9				{—	(5.64)	6.53

* Computed from E. H. Boeckh, *Manual of Appraisals* (Indianapolis: The Rough Notes Company, 3d Ed. 1937), pp. 35, 63, 67, 73, 97, 101, 109, 121, 155, 159.

Based on 1,000 square feet of floor area per dwelling unit for houses, except 1,200 square feet of floor area per dwelling unit for two-story detached and row houses; four rooms and bath for apartments. Building qualities were classified as "cheap," "average," "good," "expensive." The classification "good" was chosen for this comparison. By use of indices, 1926-29 average U.S. costs can be converted to any desired year for any desired city. Costs per square foot of floor space (not including basements) computed from standard heights, p. 35.

† Including full basement, blind attic.

‡ Face brick on all sides for houses, on two sides for apartments with common brick on two remaining sides. Joist floors. This type building not permissible in most cities above six stories in height.

§ For apartments, light structural steel frame with arched or keyed tiled floors and concrete fill. Tile partitions between apartments.

TABLE A-2

AVERAGE CONSTRUCTION COSTS PER SQUARE FOOT OF FLOOR AREA FOR DIFFERENT TYPES AND HEIGHTS OF RESIDENCE BUILDINGS, NEW YORK CITY*

TYPE OF BUILDING	NUMBER OF STORIES						
	1	2	3	4	5	6	10
Detached House							
Frame.....	\$3.84	\$3.00	\$2.88	—	—	—	—
Brick.....	4.65	3.72	3.72	—	—	—	—
Row House							
Frame.....	3.30	2.64	2.64	—	—	—	—
Brick.....	4.12	3.30	3.30	—	—	—	—
Apartment							
Semi-fireproof walk-up	—	4.76	4.08	\$3.83	\$3.67	\$3.57	—
Fireproof elevator.....	—	—	—	—	4.48	4.36	\$4.13
Medium rental.....	—	—	—	—	6.21	6.04	5.69
High rental.....	—	—	—	—	—	—	—

* Computed from data obtained from *Real Estate Record and Builder's Guide* (June 17, 1933, p. 3), as given in James Ford, *Slums and Housing*, pp. 809-10. Assumes the same number of square feet per floor.

TABLE A-3

COMPARATIVE COSTS OF TWO-STORY BRICK DWELLINGS OF VARIOUS TYPES INCLUDING LAND AND STREET IMPROVEMENTS, 1931*

TYPE OF DWELLING	NUMBER OF ROOMS	USABLE FLOOR AREA (Sq. Ft.)	COST OF BUILDING PER SQUARE FOOT OF USABLE FLOOR AREA†	WIDTH OF LOT PER DWELLING (Ft.)	COST OF LAND AND BUILDING PER ROOM AT RAW LAND COST OF:	
					\$0.10 per Net Square Foot	\$0.40 per Net Square Foot
Houses						
Detached.....	6	950	\$6.28	35	\$1,240	\$1,415
Semidetached.....	6	950	5.63	30	1,104	1,254
Row (interior).....	6	950	5.07	20	943	1,045
Row (interior).....	4½	735	6.01	16	1,131	1,238
Row flats						
Interior.....	4	600	5.37	12½	938	1,030
Interior.....	4½	725	5.32	15	998	1,098
End of row.....	4½	725	5.66	20	1,098	1,228

* From President's Conference on Home Building and Home Ownership, Vol. V, *House Design, Construction and Equipment* (Washington, 1932), pp. 41-48.

† All dwellings two rooms deep, comparable class B specifications. Based on actual cost in New York region and estimated costs in Pittsburgh. All lots 100 feet deep. Costs of improvements about \$32 per front foot including grading and public improvements for minor residential streets, except water and gas mains and lateral connections. Row flats less costly than row houses because of fewer stairs and chimneys.

† Exclusive of outside walls and halls.

TABLE A-4

COMPARATIVE COSTS OF TWO-STORY BRICK DWELLINGS OF VARIOUS TYPES AT DIFFERENT DENSITIES AND LAND COSTS, 1931*

TYPE OF DWELLING	LOT WIDTH IN FEET	COST OF DWELLING, LOT AND IMPROVEMENTS, RAW LAND PER SQUARE FOOT AT:		PERCENTAGE OF INTERIOR ROW HOUSE COST, RAW LAND PER SQUARE FOOT AT:	
		10 cents	40 cents	10 cents	40 cents
Six-room house					
Interior Row.....	20	\$5,658	\$6,270	100	100
Semidetached or end of row.....	30	6,624	7,524	117	120
	40†	7,044	8,244	124	131
	35	7,440	8,490	131	135
Detached.....	60†	8,490	10,290	150	164
Four and one-half room dwelling					
Interior row house.....	16	5,092	5,571	100	100
Interior row flat.....	15	4,491	4,941	88	89
End of row flat.....	20	4,941	5,526	97	99

* Computed from Table A-3. For similar comparisons see also Henry Wright, *Rehousing Urban America* (New York: Columbia University Press, 1935), p. 143.

† Lot width recommended by American Public Health Association, *op. cit.*, p. 37. Other lot widths are those used in President's Conference, Vol. V, *op. cit.*, pp. 41-48.

TABLE A-5

COMPARATIVE COSTS OF CONSTRUCTION AND OPERATION OF TWO-STORY FLATS AND TWO- TO TWELVE-STORY APARTMENTS, 1934*

Type of Structure	Number of Stories	Percentage Gross Coverage	Persons per Gross Acre†	Construction Cost per Room	Total Rent per Room per Month‡
Flats.....	2	37	139	\$763	\$8.45§
Walk-up apartments.....	2	35	139	775	9.29
	3	30	180	754	8.86
	4	28	216	712	8.32
	6	24	259	697	8.45
Elevator apartments 	8	23	307	741	8.69
	10	20	336	727	8.52
	12	17	346	717	8.47

* From *Analytic Study of Cost Differentials for the 2-Story Flat and 2-3-4-6-8-10-12-Story Apartments*, prepared by the Housing Study Guild, 101 Park Avenue, New York City in 1934.

Costs were computed on plans that were made as comparable as possible in all respects. Strip plans were used for the two- to four-story walk-up buildings and cross-plans for the higher elevator apartments. Higher buildings were spaced farther apart, but light angles were somewhat less desirable for the higher buildings. Small play areas were provided for children five to seven years old. Exactly comparable structural systems were used, namely reinforced concrete flat slab floors cantilevered at the outside of two rows of supporting structural steel columns, except for the two-story flat which was of fireproof-wall-bearing construction. Construction and operating costs were estimated by competent technicians with wide experience. Land costs are not included, but cost of public and private utilities, sidewalks, and landscaping are included.

† All apartments are of four rooms. Occupancy is assumed at one person per room.

‡ Not including gas and electricity.

§ Does not include janitor service.

|| Eight-, ten-, and twelve-story buildings have two elevators per building unit.

TABLE A-6

ESTIMATED CONSTRUCTION COST OF OCCUPANT-OWNED DWELLINGS DESIGNED FOR CHAVEZ RAVINE, LOS ANGELES, 1949*

TYPE OF STRUCTURE	NUMBER OF STORIES	NUMBER OF ROOMS PER DWELLING	NET COST PER SQUARE FOOT	AVERAGE GROSS COST	
				per Room	per Dwelling
Row House.....	2	5-7	\$5.92-\$6.94	\$1,700	\$ 9,563
Hillside apartments.....	3-4	5	6.29- 6.68	2,539	12,695
Multi-story apartments...	7	3½	8.33	2,931	10,257

* Adapted from Drayton Bryant and Associates, *A New Look for the City, Los Angeles, 1950* (Los Angeles: The Haynes Foundation, 1949), mimeo.—pp. 148-49.

The project is designed for adequate family living on neither a luxury nor on extreme economy basis. Multi-story apartments are fully fireproof, other buildings are ordinary nonfire-rated construction. Costs were estimated from a quantity survey and unit costs as of June, 1949. The larger row houses contain additional space in all living accommodations. Hillside units involve difficult construction problems on the site. Net costs do not include cost of garages, community facilities, overhead, or land development. Gross costs include all construction costs involved in producing a complete living environment, except land acquisition and preparation.

TABLE A-7

EFFECT OF DENSITIES AND LAND COST ON INITIAL COST AND RENTALS*
(6-story fireproof buildings, 250-square feet floor area per construction room, \$1,104 cost of building per room)

LAND COST PER SQUARE FOOT	CONSTRUCTION COST PER ROOM			RENTAL PER ROOM PER MONTH		
	25 per cent Coverage	33¼ per cent Coverage	50 per cent Coverage	25 per cent Coverage	33¼ per cent Coverage	50 per cent Coverage
\$0.75.....	\$1,231	\$1,199	\$1,167	\$10.80	\$10.63	\$10.46
1.50.....	1,357	1,294	1,231	11.47	11.13	10.80
3.00.....	1,610	1,484	1,357	12.79	12.12	11.47
6.00.....	2,116	1,863	1,610	15.47	14.10	12.79

* Computed from New York State Board of Housing, *Analysis of Costs and Rents for Public and Semi-public Housing in Cities throughout New York State, 1939* (mimeo).

Rental based on limited dividend corporation paying full taxes (3 per cent of assessed value at 80 per cent of cost) and receiving 80 per cent government loan at 3 per cent, amortized in forty-eight years with equal payments on principal and interest. Equity earns 5 per cent but no provision for retirement. Maintenance and operation costs at \$55 per construction room per year. Five per cent allowance for vacancy and rent loss.

NOTE ON ESTIMATED BUILDING COSTS IN SAN FRANCISCO REDEVELOPMENT PROJECT¹

As studies progressed, however, the practicability of proposing two-story and three-story buildings in the Jefferson Square neighborhood became doubtful. Contractors, architects, and apartment house managers agreed that not only is it more expensive to construct two-story and three-story buildings, but that it is also more costly to operate them.

One of the principal reasons for the costliness of low building types is that the recently adopted San Francisco building code requires any building containing four or more dwelling units to have at least two means of egress from each unit above the first floor. This means that even bedrooms on the second floor of a row house would require a fire escape, as well as an inside stairway. From the standpoint of cost, it was felt that the additional means of egress made the construction of two- and three-story units excessively expensive. From the standpoint of design, the added fire escapes, fire towers, or balconies leading to fire escapes diminished the possibilities of achieving cross-ventilation and privacy.

It finally was decided that ten-story reinforced concrete buildings throughout the area would use the land most advantageously and at the same time hold construction costs to the minimum.

CONSTRUCTION COSTS

After polling leading architects and getting construction cost estimates that ranged from \$9.00 to \$22.00 per square foot, it was assumed that an all inclusive cost of \$12.00 per square foot could be achieved on a project of the magnitude of the one considered in this report. Many architects expressed the opinion that \$12.00 per square foot is a reasonable figure for reinforced concrete construction. Others frankly doubted that a project could be built at this figure. Steel frame construction was not considered because of its higher cost. The San Francisco building code authorizes reinforced concrete structures up to a height of 135 feet, or ten stories; hence, this height was determined upon as permitting maximum economy of construction with the type of material selected.

For purposes of this study it was not deemed necessary to make detailed estimates of building costs.

With a construction cost of \$12.00 per square foot, the per room cost in the project presented herein would be \$3,527, exclusive of land and site development costs.

RENT PER ROOM PER MONTH UNDER VARIOUS SUBSIDY ARRANGEMENTS

Write-off on Cost of Land*	Full Taxes on New Buildings	Taxes Now Paid in the Area
10%*.....	\$31.34	\$28.00
75%†.....	29.23	25.88

* Land cost, demolition, and site clean-up is 14 per cent of total project cost.

† Land cost, demolition, and site clean-up is 5 per cent of total project cost.

1. (Excerpts from San Francisco City Planning Commission, *Western Addition Redevelopment Study* [November, 1947], pp. 43, 49-50, 53-54).

CHAPTER III

COSTS OF PUBLIC SERVICES IN VARIOUS URBAN PATTERNS AND DENSITIES

MANY cities are generally aware of the excessive costs of servicing their slums and blighted areas on the one hand and their sprawling and partially built-up medium and low-income suburbs on the other. In the last two decades, a number of cities have made studies of these problems and the results of many of them have been summarized in several different volumes.¹ Unfortunately, these studies have not been able to distinguish statistically the effects of density or of low income of residents from many other factors affecting governmental costs. Speaking of blighted areas in particular, Mabel Walker has written:

There are some aspects of the situation of the blighted area, however, that are of grave importance from the standpoint of the general mass of citizens as well as of the city treasury. The first is a disproportionate amount of tax delinquency as compared with other areas. The second is the impairment of taxable values in adjacent property. The third is when per capita costs for police, fire, and health protection in a blighted area exceed such costs in an unblighted region in which families of similar economic status are housed. When these three conditions prevail, there is a situation of economic drain of abnormal character. There is evidence that these conditions are present in the case of blighted areas of long standing. . . .

Isolating the extent to which governmental costs can be attributed primarily to blight rather than to poverty is, however, exceedingly difficult, because it may be hard to find groups of similar economic status in unblighted regions for comparison. The cheapest accommodations are frequently found in the decadent areas and the poorest citizens find it necessary to secure as cheap accommodations as can be obtained. It should be possible, however, in some cities to segregate these factors in a way to get some worthwhile data concerning the effect of blight on governmental cost.

Ignoring, if we wish, the statistical data on governmental costs in the preceding chapter as inadequate, we may nevertheless make some commonsense deductions concerning the matter. Excessive governmental costs due to blight may be assumed when the deteriorating process has proceeded to the point where an exceptional fire hazard has been created, where the danger of infection is increased by congestion, where dampness and lack of sunlight promote the spread of tuberculosis and

1. See particularly Mabel L. Walker, *Urban Blight and Slums* (Cambridge, Mass.: Harvard City Planning Studies XII, 1938), chapters IV and V; and Alvin H. Hansen and Harvey S. Perloff, *State and Local Finance in the National Economy* (New York: W. W. Norton and Co., 1944), pp. 107-12.

other ailments and increase infant mortality, where lack of adequate plumbing makes cleanliness impossible, where communal toilets give rise to infection and vice, and where depressing home conditions and the lack of parks and playgrounds increase juvenile or adult delinquency.²

The high cost of servicing sparsely populated outlying areas is also well established. Many miles of streets and utilities requiring maintenance and sometimes considerable capital improvement serves relatively few dwellings. More fire stations, equipment, and personnel are necessary to give the level of protection commonly found in the moderately well-built-up sections. Many cities are reluctant to annex outlying areas because of the disproportionate cost of servicing them.³

Such considerations lead to the conclusion that many of the taxpayers' dollars could be saved if urban development and redevelopment could be accomplished at the most efficient densities. Unfortunately, however, there is a great lack of adequate data on which any city can determine what are the most efficient patterns of density. This chapter will draw attention to some of the few studies and materials that are available on this subject and point toward the pressing need for more research to guide municipalities in reshaping their cities to form more efficient as well as more livable urban communities.

Whereas floor and lot densities were the focus of attention in the preceding chapter, this chapter deals with the density of residential neighborhoods and of whole cities and metropolitan areas. The individual building lot forms too small an areal base on which to appraise adequately the costs of public services. The length and type of streets and utilities and the need for parks, schools, police, fire and health services are dependent on the type of building development and density of whole residential neighborhoods or of the entire city rather than on the density of any particular plot.

In order to outline more clearly the various problems involved, this chapter will deal in turn with governmental costs in the following contexts:

1. *A single residential area, generally of from one quarter to one*

2. Mabel Walker, *op. cit.*, pp. 69-71.

3. See *Report of the Commission on the Economic Study of Milwaukee*, Harold M. Groves, Director of Research Staff, Milwaukee, 1948, p. 222. See also Appendix B-1 showing estimated maintenance expense and revenue for three areas proposed for annexation to Greensboro, N.C. Residential areas, except for those occupied by high-income families, very rarely yield in taxes enough to cover maintenance expenses, the balance being made up from taxes on industrial and commercial property (and state aid for schools, if educational expenses are included). Medium- and low-income residential areas of low density generally pay directly through taxes only a fraction of the municipal expenditures made in these areas. Indirectly, however, the residents of these areas, through their support of commercial and, to a lesser extent, industrial properties ultimately pay for municipal services to a considerable degree.

square mile in area, with a population large enough to support at least one and perhaps several elementary schools, together with adequate local shopping, recreation, and other community facilities. Population may vary from as low as 2,000 to as high as 50,000.

2. *Comparative studies of residential areas* in different sections of the city, particularly the comparison of inlying blighted sections requiring considerable demolition of existing structures with outlying areas of vacant or sparsely developed land.

3. *Over-all city areas* including major commercial and industrial areas as well as residential neighborhoods. Although such over-all areas should ideally include the whole of a metropolitan area, it is difficult to make valid comparisons between different municipalities because of differing levels of service, different accounting methods, and other factors.

MUNICIPAL COSTS AS RELATED TO DENSITY

Some costs of rendering municipal services, omitting land costs,⁴ are roughly proportional to the population to be served regardless of density, assuming comparable levels of service. These types of services include schools, health and library services, and playgrounds for active recreation. The cost of a second type of services, such as streets and utilities,⁵ refuse disposal, and parks for passive recreation,⁶ will vary considerably for a given population depending on density of development. This is true because each property must have access to streets and utilities no matter what the density. As density increases, however, wider and heavier pavements and larger capacity utilities are required,

4. Higher land costs in higher density areas would result in higher costs even for some of these services. This factor is discussed more fully later in this chapter.

5. Even if the original cost of local streets and utilities is borne by the property benefited, the municipality has the responsibility for cleaning, snow removal, and maintenance.

6. Standards for adequate playground space for active recreation have been fairly well established, including the principle that such playgrounds are needed in areas of single-family homes as well as in multi-family areas. But similar standards for parks for passive recreation have not been adequately formulated. Considering the amount of private yard space available in one- and two-family house areas, the following standards have been advanced tentatively for neighborhoods of 5,000 population:

1. In multi-family areas or other developments predominantly without private yards, a park of six acres.

2. In one- and two-family and group house areas with lots of less than one-quarter acre per family, a park of three and one-half acres.

3. In one- and two-family areas with lots of more than one-quarter acre per family, no neighborhood park.

Source: American Public Health Association, *Planning the Neighborhood* (Chicago: Public Administration Service, 1948), pp. 47-49. This same source also indicates ways in which park, playground and school areas can be reduced somewhat by arrangements for multiple use.

but the costs usually increase at a less rapid rate than the density of population. In regard to major traffic arteries and trunk sewers and water mains, the sprawling or spread-out city will obviously require more mileage per capita than the concentrated high density city. As discussed more fully later on in this chapter, the design of the street pattern can considerably affect street and utility costs even with the same density of development.

A third group of services, particularly fire protection, and in some instances policing, will depend partly on the character of the population, and type, design, and construction of property served, and partly on density of development and rapidity of access. For example, a low-density development will generally require more fire stations, equipment, and personnel per capita population than a high-density area in order that each property may be reached in a minimum of time. The penalty for less adequate fire protection is higher fire insurance rates on private property. This introduces a consideration of public as compared with private costs, a topic which is discussed in chapter iv.

The relation between police costs and density of population is more difficult to establish than in the case of fire protection. Under the older methods of furnishing police service, a low-density city would require more precinct stations and personnel. More recently, however, the introduction of three-way radio communications between police cars and central stations and the use of one-man rather than two-man crews in each car offer more efficient methods of police patrol that may prove to be practically as inexpensive for low-density as for high-density areas. In any event, there are so many factors other than density affecting police costs that any exact relationship with density could be determined only by special studies in each city.

Because of these differences in relationships between costs of various public services and density, each type of public service must be considered separately. It seems, however, that major attention should be given to such facilities as streets and utilities whose per capita costs are known to be fairly closely related to density, assuming similar standards of construction and maintenance. Other services, whose relation to density is more difficult to establish, would either have to be omitted from the scope of the study or examined in great detail on the basis of careful analysis of existing conditions and level of service and of the possibilities of greater efficiencies in each jurisdiction.

METHODS OF STUDY

As in the case of residential buildings, two methods of studying costs of public services are available. One method would depend on selection

of a group of existing residential sections or cities, comparable in terms of income of families, type of development, and other features, but varying in density. The costs of various public services to these areas could then be isolated and compared. The major difficulty with this method is not hard to find. Existing residential areas that vary significantly in density but are also sufficiently comparable in other respects are exceedingly rare, particularly in a single city or a group of cities where similar levels of service and comparable accounting methods can be found.

The other method of study, which seems to offer more promising results, deals with estimated costs of public services for site layouts for theoretical areas that are similar in all important respects except for variations in density and design. These estimated costs should be based on unit costs for various services in a specific city or the part of the city proposed for redevelopment. By unit costs is meant such items as cost of street paving of the required type per square yard, cost of street maintenance and street cleaning per square yard, cost of park development and park maintenance per acre, and similar items for all other local services. In all cases, such unit costs should include both capital costs financed by the city and municipal operating and maintenance expenditures. These unit costs could then be applied to plans for areas of different density and design to determine (*a*) comparative efficiencies for the same level of services, or (*b*) the variation in costs that would result from different space standards and levels of service.

Very few studies have been carried out by either of these methods⁷ and their results have not been particularly conclusive beyond the rather obvious finding that very low-density areas of detached houses are considerably more expensive per capita to service than row-house or multi-family developments. In the higher-density ranges, there is very little information with regard to comparative efficiencies.

DENSITY AND DESIGN FOR A SINGLE RESIDENTIAL AREA

Perhaps the most common type of study bearing on the subject in hand is concerned with the comparative capital costs of large subdivisions of varying design and density. For example, a study of an area of about one square mile in Trenton, New Jersey,⁸ shows that by re-planning a reduction of from 30 to 35 per cent in street area could be accomplished with an estimated saving in street improvement costs of nearly half a million dollars. Street and utility maintenance costs

7. Some of the studies bearing on these problems are mentioned later in this chapter.

8. New Jersey State Planning Board, *Municipal and County Planning Legislation and Procedures in New Jersey* (Rev. ed. September, 1939), pp. 28-31.

would also be decreased by the reduction of street mileage and area. At the same time, without loss of saleable plottage, the area in school grounds and park playgrounds could be increased from the existing 26 acres to a potential 85 acres. Many other studies of this type could be cited showing how improved subdivision design can reduce street acreage, with the area thus saved resulting in larger parks and playgrounds or larger areas for building development.⁹

A study by Messrs. Adams and Baumgarten, made in 1932 in collaboration with the Harvard School of City Planning, indicates a measure of the savings that can be accomplished by increased density as compared with those made possible by improved design.¹⁰ According to this study, a 200-acre neighborhood of detached houses with a normal grid-iron street pattern would result in a cost of public improvements, including streets, sewers and parks, of \$547 per dwelling unit. Various irregular street patterns with less street area and more park area would result in savings in public improvement costs of from \$52 to \$120 per dwelling. On the other hand, if the density of the tract were increased from 6.5 to 10.25 dwellings per gross acre by the provision of multi-family buildings for about half the families, the cost of public improvements would result in a saving over the least costly detached house scheme of \$175 per dwelling. This comparison appears to indicate that, at the lower ranges of density at least, considerably larger savings can be made by only moderate increases in density than solely by more efficient design.

A pioneering study by F. Dodd McHugh¹¹ of a hypothetical 160-acre community in East Harlem, New York City, includes data both with regard to the capital cost of providing public services and with regard to annual operation and maintenance expenses. This study is of particular interest because it offers data on the redevelopment of a high density area, rather than dealing exclusively with the development of a new area on vacant land. The public services included in this analysis are streets, street utilities, parks, playgrounds, elementary and high schools, library and health buildings, fire, police, sanitation, sewage and refuse disposal, and rapid transit. The inclusion of rapid transit, which is a customary public service in New York City, renders most of the resulting conclusions of doubtful value for any city other than New York. Furthermore, standards of public improvements and service as well as the unit costs used are peculiar to New York City practice so

9. For a listing of some of these studies, see American Society of Civil Engineers, *Land Subdivision*, prepared by the Committee of the City Planning Division on Land Subdivision Manual, Headquarters of the A.S.C.E., 33 West 39th St., New York, 1939.

10. See Appendix Table B-2.

11. F. Dodd McHugh, "Cost of Public Services in Residential Areas," *Transactions of the American Society of Civil Engineers*, CVII (1942), 1401-46.

that, even with rapid transit costs excluded, other cities cannot rely on the conclusions without extensive revisions to make the analysis applicable to their own conditions. With these words of warning, some of the conclusions of the McHugh study may be summarized briefly. Because of the complexity of the study, however, the original text should be examined to assure an adequate understanding of all the qualifications and implications.

Taking into account the extent to which existing improvements can continue to be used, this study shows that merely replacing the existing facilities as required over a period of years would result in an improvement cost per person housed of \$134 (at 1940 price levels). If adequate park facilities are to be provided the improvement cost would more than double, partly due to the high cost of additional land for parks. On the other hand, if a master block system is substituted for the present gridiron street pattern, and if adequate park facilities are provided from this saving in street space, the improvement cost would be only 20 per cent greater than if the gridiron street system and the present very inadequate park space were maintained. These comparisons are all made on the basis of housing the same number of persons as are now on the site.

Computations were also made to show the comparative costs of redevelopment, on a master block pattern, over a very wide range of densities in order to determine the optimum density at which public improvement costs per capita would reach a low point for the particular area studied. These computations revealed that as densities declined, improvement costs per capita also declined reaching a low plateau at between about 250 and 450 persons per net acre. Such densities are roughly equivalent to six-story apartments covering between 20 and 40 per cent of the lot area. As densities declined below 250 persons per net acre, public improvement cost began to rise again.¹²

Mr. McHugh's study also presented data on annual expenses for operation and maintenance of public services, but unfortunately the results of these computations are not available for the density ranges that had the lowest per capita capital costs of public improvements. These data do indicate, however, that redevelopment of the particular area studied at a high density on a master block basis with adequate provision of public services could not be expected to offer appreciable savings in annual expense over the present annual expense of operating inadequate facilities. If debt service on rapid transit were eliminated, the saving would be somewhat greater, amounting to about a 10 per cent reduction. There is no definite indication, however, of whether

12. See Appendix Table B-3.

lower density redevelopment would or would not result in any substantial savings in annual expense.

Although no general conclusions with regard to other cities can be drawn from Mr. McHugh's study, it does indicate the importance of making such analyses before proceeding with proposed redevelopment projects. Not only will such studies serve to indicate the savings to the taxpayer that can be accomplished by well-planned redevelopment, but they will also show the densities for specific redevelopment projects at which such savings can be maximized. When such savings are added to expected increases in public revenues from the higher taxes paid by new private projects,¹³ this gross gain to the municipality can be compared with the annual carrying charges on bonds floated to finance redevelopment. Thus a balance sheet can be drawn up showing the net gain (or loss) to the municipality that could be expected to accrue from any specific project. If no gain could be expected, the project might be modified so that it would result in a net gain. Or it might be decided that the particular project under consideration should be abandoned. In any event, the importance of economic criteria alone should not be overemphasized. Even though the balance sheet revealed a net loss to the municipality, it still might be decided to proceed with a project because of the social values involved, or because of expected economic gains that could not be caught within the framework of the type of balance sheet being used.

Summarizing this section, it appears that the costs of providing public service to a residential area are greatest at very high and at very low densities. At some intermediate point in the middle density ranges, public service costs are lowest. Special studies are needed in each city to determine the density ranges which will be conducive to lowest governmental costs in any specific locality.

COMPARISON OF RESIDENTIAL AREAS IN DIFFERENT LOCATIONS

A broad urban redevelopment program is concerned not only with the efficiency of individual projects in terms of municipal finance, but also with the comparative effects on municipal costs of projects of different types in different parts of the city. In more specific terms, this second problem may be considered from the point of view of redevelopment of built-up blighted areas near the heart of the city as compared with projects on open land in outlying locations. For each city, however, there may be many variations of this problem involving com-

13. This statement is based on the assumption that, without redevelopment, this new housing would not be built in the municipality.

parative costs in a number of different possible sites throughout the city.

Mr. McHugh's study referred to above throws some light on this type of problem and suggests methods that could be used for more varied types of comparisons. Specifically, the McHugh study compares the costs of public services for a high-density redevelopment project in East Harlem with those for an exactly comparable project placed on vacant land on the outskirts of Brooklyn near Jamaica Bay. The results of this comparison are summarized in the following table:

TABLE 1
ESTIMATED PER CAPITA COSTS OF PUBLIC SERVICES FOR SIMILAR PROJECTS
IN BUILT-UP AND VACANT AREAS IN NEW YORK CITY*

Area	Capital Cost of Public Improvements	Annual Expense for Maintenance and Operation
	Including Rapid Transit	
East Harlem (built-up).....	\$119.66	\$41.32
Brooklyn (vacant).....	403.18	42.94
	Excluding Rapid Transit	
East Harlem (built-up).....	\$ 94.87	\$37.55
Brooklyn (vacant).....	179.11	31.99

* From McHugh, *op. cit.*, p. 1418.

Note: Brooklyn provides a somewhat less expensive level of service than Manhattan (East Harlem), particularly in such items as street cleaning, refuse removal, and fire and police protection.

This table emphasizes the extremely high cost of providing rapid transit of the New York City type in outlying areas, and the considerable proportion of annual expenses necessary to cover debt service on rapid transit extensions to new areas.¹⁴ Even when rapid transit costs are excluded, the cost of providing entirely new public facilities in outlying areas is nearly twice that of bringing public facilities in the built-up area up to acceptable standards. In addition, if it is assumed that new outlying areas will attract population out of interior blighted sections, the cost of providing new duplicating facilities on the periphery must be augmented by the costs of continuing maintenance on many of the existing facilities in the older parts of the city. In regard to operation and maintenance expenses much of the validity of the comparison is vitiated by the fact that a significant part, if not all, of the lower costs for Brooklyn (excluding rapid transit) are due to a less costly and lower level of service for such items as street cleaning, refuse removal, and fire and police protection.

In evaluating the significance of Mr. McHugh's data, it should also be borne in mind that part, if not all, of the capital expense of such items as local streets and utilities in vacant areas may be met by the

14. Operating expense of rapid transit is assumed to be covered by fares paid.

developer rather than the city. In built-up areas, where satisfactory redevelopment would require street and utility modifications and improvements, these costs could be placed on the developer if desired, but more likely they will be included as part of the city's contribution to the redevelopment project. For capital improvements such as schools, parks, libraries, health buildings, sewerage and refuse disposal facilities, and fire and police stations and equipment, which are normally provided by the city, the difference in cost between vacant sites and built-up sites will depend in large measure on the extent to which such facilities are already adequately provided in the existing built-up area. Thus, the necessity for each city to make its own studies is further emphasized.

A very worthwhile extension of Mr. McHugh's type of study would involve the comparison of costs for different sites when developed at varying densities. To a certain extent Mr. McHugh's techniques lend themselves to this type of comparison. In other respects, modifications of his methods would be necessary to yield valid results.

A somewhat similar approach to that of Mr. McHugh's would put particular emphasis on the costs of acquisition of land for public purposes. In the McHugh study these costs are kept down by the device of changing a gridiron street system into a superblock pattern and using the land thus saved to increase park, playground, and school acreage to the extremely low standards recommended for New York City by the Mayor's Committee on City Planning. In redevelopment areas, where significant savings in street acreage are not feasible or where more adequate provision of public recreation space is desired, the cost of additional land, including that of existing buildings that must be demolished, can run to very high totals. On the other hand, the construction of new communities on vacant land where land costs are low requires a complete new set of public buildings and facilities.

It has been suggested¹⁵ that examination of this problem might start with the assumption that existing streets, utilities, and public buildings in the built-up redevelopment area are generally satisfactory, but that considerable additional land would be needed for adequate school, playground, and park sites and for other public needs. Based on one or more sets of assumptions as to space standards and land costs, it would then be possible to compare the cost of public improvements as between redevelopment of built-up areas and new building on vacant land. In addition such comparisons might be extended to projects of varying density.

In applying this method to any specific city, it would be necessary

15. The following discussion has been developed from data and comments from Mr. Hans Blumenfeld of the Philadelphia City Planning Commission.

to modify the assumption that all public facilities in built-up areas are satisfactory, and to substitute cost figures for the amount of improvement in existing facilities required to make them adequate to serve the area after redevelopment. In effect this is the method used by Mr. McHugh. Although such methods may appear to be involved and complex, in fact, after the basic conditions, standards, and unit costs have been determined, the various cost relationships can be easily and rapidly computed for a wide variety of designs and densities.

As an illustration of these types of computations and the conclusions they reveal, Tables 2 and 3 have been prepared. They show capital

TABLE 2

ESTIMATED CAPITAL COST OF RECREATION FACILITIES (PARKS, PLAYGROUNDS, AND SCHOOL GROUNDS) AT VARIOUS DENSITIES AND LAND COSTS

TYPE OF BUILDING	PERSONS PER NET ACRE*	COST OF RECREATION FACILITIES PER SQUARE FOOT OF RECREATION SPACE			SQUARE FEET OF RECREATION SPACE PER CAPITA*	PER CAPITA COST OF RECREATION FACILITIES
		Land†	Develop- ment‡	Total		
Detached house.....	25	\$0.25	\$0.16	\$0.41	100	\$ 41
Row house.....	65	0.65	.16	0.81	100	81
3-story apartments.....	160	1.60	.16	1.76	125	220
13-story apartments.....	350	3.50	.16	3.66	125	458
<i>With write-down of land costs†</i>						
3-story apartments.....	160	0.80	.16	0.96	125	120
13-story apartments.....	350	1.50	.16	1.66	125	208

* Standards of density and recreation space computed from American Public Health Association, *op. cit.*, pp. 53 and 64 (5,000-person neighborhood) and rounded to nearest multiple of 5. Multi-family buildings without private yards require more park area per capita.

† Land cost is assumed at \$1,500 for a 6,000 square foot lot for detached houses. For other housing types, land cost is assumed to increase in direct proportion to density when there is no write-down. This assumption implies that higher densities are an indication of proportionately higher land costs; in other words that the proportion of rent used to cover financing changes on land cost is the same for all densities, when there is no write-down. With write-down, cost to private developers is assumed at 40 cents per square foot for three-story apartments and 50 cents per square foot for thirteen-story apartments. Assuming one-third local, two-thirds federal grant for land cost write-off, local government would ultimately pay for recreation land additional amounts of \$0.40 and \$1.00 respectively for three- and thirteen-story apartment developments. These figures are not intended as recommendations but are merely for the purpose of showing the effect of specified financial arrangements on costs.

‡ Development costs at \$7,000 per acre (average for New York City used in McHugh, *op. cit.*, p. 1425).

TABLE 3

ESTIMATED PER CAPITA ANNUAL EXPENSE FOR PUBLIC RECREATION SERVICES (PARKS, PLAYGROUNDS, AND SCHOOL GROUNDS) AT VARIOUS DENSITIES AND LAND COSTS

TYPE OF BUILDING	PERSONS PER ACRE*		PER CAPITA ANNUAL EXPENSE		
	Net Lot Area	Gross Neighborhood Area	Debt Service†	Operation and Main- tenance‡	Total
Detached house.....	25	19	\$ 1.23	\$1.21	\$ 2.44
Row house.....	65	42	2.43	1.21	3.64
3-story apartments.....	160	72	6.60	1.51	8.11
13-story apartments.....	350	112	13.74	1.51	15.25
<i>With write-down of land costs</i>					
3-story apartments.....	160	72	3.60	1.51	5.11
13-story apartments.....	350	112	6.24	1.51	7.75

* Densities from Table 2 and American Public Health Association, *op. cit.*, p. 65.

† Combined interest and amortization assumed at 3 per cent of capital cost.

‡ Based on New York City average of \$525 per acre for all recreation facilities under park department. See McHugh, *op. cit.*, p. 1431.

costs and annual expenses for recreation facilities and services including parks, playgrounds, and school grounds, at differing densities and land costs. These data are designed to show particularly the effect of land costs on annual expense for recreation services and the extent to which these municipal costs can be reduced by redevelopment procedures involving federal grants. It should be remembered that per capita costs for most public services are not borne directly by the population benefited but are a charge against the total revenues of the municipality. Thus the taxpayers in general benefit from any reductions that can be made.

At the standards and unit costs used in these computations, the overall annual expense for recreation services in detached house areas with land costs at 25 cents per square foot is \$2.44 per capita. With increases in density and land cost, the recreation expense multiplies rapidly. For three-story apartment developments with land costs at \$1.60 per square foot, the recreation expense is three times greater; and for thirteen-story developments with land costs at \$3.50 per square foot, the recreation expense is six times greater. However, through federal grants now available for writing down land cost, recreation expense in the high-density developments can be cut almost in half. Thus, federal aid now brings to municipalities the possibility of providing high standards of recreation services even in the most densely redeveloped areas at a cost that should not greatly overburden local taxpayers. In fact, if the provision of such services and the accompanying general openness of environment can be an important factor in preventing loss of population to the suburbs, the municipality will stand to gain immeasurably. *It cannot be emphasized too strongly, however, that these figures are merely illustrative of the general relationships that can be revealed by relatively simple methods of calculation. Each city should prepare comparable analyses keyed to its own particular conditions and problems of redevelopment.*

Summarizing this section, available data on New York City appear to validate the commonly held opinion that it is much less costly for cities to redevelop completely interior areas according to modern planning principles than to develop and service new outlying areas. However, many more studies of comparative public service costs for alternative types and densities of inlying and outlying developments in different cities are necessary before this hypothesis can be accepted as a general principle. The use of federal subsidies to aid in writing off high land costs will further reduce the cost to the municipality of providing adequate public open space in central areas and give cities greater incentive to achieve efficient public services of high standards by redevelopment of interior sections.

CITY-WIDE AND METROPOLITAN PATTERNS OF LAND USE AND DENSITY

It is important that the efficiency of various densities and patterns of land use should be examined not only with reference to specific areas which are appropriate for redevelopment or new development but also with reference to the whole pattern of metropolitan densities and land use. In any long-term program of urban redevelopment, it may be assumed that within fifty or at most one hundred years practically the entire metropolitan area will be rebuilt. Thus each redevelopment project or new subdivision of vacant land will play its part in forming the eventual metropolitan pattern. This approach to the problem involves broad considerations of the relative costs of public services in cities of different size when size is measured in terms both of population and of land area, and when these two factors are related by density measurements.

Many studies of municipal finances present analyses comparing cities grouped according to population size, but no studies have been found that compare governmental costs according to land area or density of cities. Reasons for this omission are the difficulty of finding a basis for measuring density appropriate to the problem being studied, and the added difficulty of obtaining comparable density measurements for the large number of cities that should be included in order to average out the effects of different types and levels of service found in different cities. A further reason for the lack of such studies is that relatively little interest has been shown in the problem of municipal efficiency as affected by density.

Quite a large body of data on per capita costs of government for cities of different population size is available, and a few significant tables and analyses of these data are given in Appendix B. In general, these data appear to indicate that, at least in the size range above 5,000 population, the larger cities as a group have considerably higher governmental costs than the smaller cities. In appraising the validity of these conclusions, however, three important qualifications must be observed.

In the first place, the data for different cities do not all cover the same range of services. For example, some large cities have consolidated city-county governments and furnish services that separate county governments furnish to most cities. In some cases, expenditures of special districts, such as school, park, or sanitary districts, are not included.

In the second place, larger cities generally perform more functions and services for their citizens than smaller cities. To a considerable extent, nevertheless, the greater number and higher quality of services

available in larger cities may not represent any advantages to their residents, as compared with the services and living conditions available in smaller cities. In many cases, such more expensive services may be due to factors occasioned by the very size of the city, as, for example, greater volume of street traffic moving longer distances, more pressing parking and rapid transit needs, and greater health, fire, crime, and delinquency hazards.

In the third place, it must be remembered that a wide variation will be found in the quality of services and governmental costs from one city to another, even within a single size group. Thus, average figures for any size group may be quite deceptive.

Bearing these qualifications in mind, it is of interest to study the available data (given in Appendix B) with regard to the per capita costs of furnishing specific services. Many functions, such as police, hospitals, education, welfare, and sanitation, generally cost more in the larger than in the smaller cities. For other types of services such as highways, health, fire, and recreation, the relationship between size of city and per capita costs seems to be less direct. In general, it appears that cities of over half a million population have considerably higher aggregate costs per capita than smaller cities.

In this connection, it should be noted that the average over-all density of all cities of over half a million population is more than double that of cities in the groups between 50,000 and 500,000 population.¹⁶ A great deal more detailed study would be necessary to determine to what extent differences in density alone may be a factor in higher costs in the larger cities.

A number of attempts have been made to arrive at conclusions concerning the optimum size of city from the point of view of lowest cost of municipal services, assuming comparable and relatively adequate levels of service. Even those who have gone into the subject most deeply offer conclusions only with many reservations because no studies have been adequately organized. The obstacles to such studies are very great and definitive results cannot be expected, except perhaps with very large research expenditures. Hansen and Perloff, after study of many available secondary sources, suggest that governmental units need populations of at least 50,000 in order to offer most efficient services, particularly in the fields of education, health, and welfare.¹⁷ The problem of optimum size of city has also been the subject of consid-

16. See Table B-7. Note particularly the great range of densities even within each population group. Note also, by comparison of Tables B-7 and B-8, that at least in the 50,000 to 500,000 population range, available data do not indicate any great variation in average proportion of vacant land in each size group of cities, although there are great differences among individual cities.

17. Hansen and Perloff, *op. cit.*, chap. 5.

erable study in Great Britain. The New Towns Committee suggests an optimum size range of 30,000 to 80,000 population based partly on economy of public services and partly on other economic and social criteria such as desirability of contact with the countryside and the difficulty of attaining a sense of civic consciousness in very large communities.¹⁸ Other British writers have suggested somewhat larger optimum sizes. H. S. Phillips comments:

I would tend to conclude that, even before calculating any correlations between size and costs, the incongruities are so apparent as to make generalizations dangerously foolish. Towns of below 100,000 inhabitants have little or nothing in their favor, unless it be geographical necessity, but somewhere between 100,000 and 250,000, the evidence, whilst being too meagre to call for dogmatism, makes it seem probable that town efficiency will have an optimum technical position. . . . One might say that the "civic unit," whether it be independent or part of a metropolis, will be likely to find an optimum position between these two sizes *Planning may well alter the matter entirely*, in favor of the larger sizes.¹⁹

Extensive data assembled by Percy Parr indicate an optimum size range, from the financial point of view, of 50,000 to 500,000 population with cities of 100,000 to 150,000 population appearing to be the most economical.²⁰

The sources mentioned above and other studies²¹ seem to point to the tentative conclusion that, from the point of view of efficiency of public services, the lower limit of efficient city size in terms of population is in the neighborhood of 50,000. There also seems to be general agreement that per capita costs of public services in very large cities tend to be considerably higher. However, there is little substantial evidence to indicate at what point, as population size increases, the efficiency of local government services begins to decline appreciably. One of the difficulties is that empiric evidence on this point is based largely on existing cities which have grown up without benefit of planning to promote municipal efficiency. It is possible that quite large cities built or redeveloped with the aid of careful planning might be operated as efficiently or almost as efficiently as cities of 50,000 population.²² In

18. *Final Report of the New Towns Committee*, H. M. Stationery Office, Cmd. 6759, London, 1946.

19. H. S. Phillips, "Municipal Efficiency and Town Size," *Journal of the Town Planning Institute* (London, May-June 1942).

20. Percy Parr, "Local Government Reform: An Engineer's Comments," *Journal of the Institution of Municipal and County Engineers* (London, Aug. 7, 1945).

21. For further reference to both British and American studies, see Otis Dudley Duncan, *An Examination of the Problem of Optimum City-Size*, a Ph.D. dissertation in the Department of Sociology, University of Chicago, March 1949, especially chapter vii.

22. Obviously, many other factors besides efficiency of public services enter into the problem of optimum city size. Some of these factors have to do with livability, including access to the open country on the one hand, and accessibility to cultural, health, and higher educational facilities on the other. In addition, the type of economic base is extremely im-

carrying out studies of this problem, two very important factors would be the pattern of land use and the density of development. For example, would a low-density planned city of 50,000 population be more or less expensive to build and operate than a large city of relatively high density as envisioned by Le Corbusier, or a large metropolitan area made up of a cluster of relatively low-density satellite cities separated by wide greenbelts, as Tracy Augur and others advocate? Much theoretical work needs to be done in this field, as well as studies of specific cities, taking into account local factors of topography, economic base, and the like.

To indicate more specifically one possible approach to this type of problem, the accompanying Table 4 has been prepared. The purpose

TABLE 4

AREA AND RADIUS OF CITIES OF THREE SELECTED SIZES AT VARIOUS RESIDENTIAL DENSITIES

Type of Housing	Detached Houses	Row Houses	Three-Story Apartments	Thirteen-Story Apartments
Persons per acre of				
Net dwelling area*.....	25	65	160	350
Residential neighborhood area*.....	19	42	72	112
Total developed urban area†.....	14	23	29	35
Square miles of total developed city area‡ for cities of				
50,000 population.....	5.6	3.4	2.7	2.2
200,000 population.....	22.4	13.6	10.8	8.8
800,000 population.....	89.6	54.4	43.2	35.2
Radius‡ (in miles) of city of				
50,000 population.....	1.34	1.04	.93	.84
200,000 population.....	2.68	2.08	1.86	1.68
800,000 population.....	5.36	4.16	3.72	3.36

* Net dwelling density and residential neighborhood density (including streets and community facilities) computed from American Public Health Association, *op. cit.*, p. 64.

† Total developed urban density computed from residential neighborhood density plus two acres per 100 population for all other urban land uses including central commercial, industrial, railroad, nonlocal public and semipublic uses and streets serving them. Allowance of two acres per 100 population for these uses based on average figures for medium and large cities from Eldridge Lovelace, "Urban Land Use—1949," *Journal of the American Institute of Planners*, Vol. XV, No. 2 (Summer, 1949).

‡ Area and radius of cities computed from total developed urban density. Computation of radius assumes a city exactly circular in shape, so that as city area quadruples, radius doubles. For cities of semicircular or elongated shape, such as those bordering lake shores or wide rivers, greatest distance from the center would be considerably greater.

portant. Commercial cities serving large hinterlands must be much larger than towns serving small trading areas. Some types of industries are apparently most efficiently operated with very large plants or in clusters of similar or interdependent plants which would require cities of considerable size to house their industrial workers and associated workers in service occupations. These types of problems have been dealt with at considerable length elsewhere.

An additional factor in planning city size is vulnerability to atomic bomb attack and to other catastrophes such as earthquake or fire devastation. In this connection, the National Security Resources Board in National Security Factors in Industrial Location (September, 1948, p. 2) states: ". . . it is possible to develop a few general rules in considering strategic industrial location or relocation. The scarcity of the essential materials for the manufacture of an atomic bomb makes production so costly that we may reasonably assume that no country in the foreseeable future will ever have enough to afford to use one on each city of as few as 50,000 people, or on a congested industrial area of less than five square miles. It is, therefore, strategically desirable to plan industrial expansion so that further urban concentrations of more than 50,000 people may be avoided."

of this table is to show certain relationships between city size in terms of population and city size in terms of land area, as a basis for estimates of comparative costs of furnishing municipal services. The densities suggested range from those appropriate for a city in which all residents are housed in detached houses on 60- by 100-foot lots to those appropriate for a city whose residential areas are made up entirely of widely-spaced thirteen-story apartments. Actually, most cities are made up of various combinations of dwelling types and of varying amounts of nonresidential land in relation to population. Nevertheless, a large proportion of all cities of 50,000 population or more fall within this density range, very few being more dense but a considerable fraction being less dense, even when all vacant land is excluded.²³ In this connection, it is interesting to note that whereas the *net dwelling density* of a thirteen-story development is fourteen times greater than that for detached houses, the *over-all developed density* for the city of thirteen-story apartments, assuming adequate standards for nonresidential land, is only two and a half times greater than that for the city of detached houses. This is due to the fact that, assuming modern standards of planning for recreational, industrial, and commercial facilities including parking areas, very nearly the same area per capita will be required for nonresidential uses for the average city regardless of the density on dwelling lots.

The data on area of cities given in Table 4 suggest that substantial increases in population size will nearly always result in larger total city areas, even though density on dwelling lots is also substantially increased. More specifically, a planned city of 50,000 population in detached houses will in most cases have a smaller total area than a city of 200,000 population in thirteen-story apartments. This relationship suggests that increase in lot density alone cannot be looked upon as a measure to offset higher municipal costs that are due to large population and larger total land area of the city. *In other words, in relation to certain types of municipal services, efficiently planned cities of large population size will nearly always have higher per capita costs than cities of small*

23. Very few cities have densities on their developed land (vacant land and water area excluded) higher than thirty-five persons per acre, the top of the range given in Table 4. Among these very dense cities for which adequate data are readily available are New York City and Newark, New Jersey. On the other hand, a number of cities have lower developed densities than fourteen persons per acre, the bottom of the range given in Table 4. Of thirty-eight selected cities of population 50,000 to 800,000 for which data on density of developed area are available, one-third have densities lower than that of the bottom of the range. It should be remembered that in measuring these densities all vacant land is excluded, whether in large tracts on the outskirts or in scattered lots throughout the built-up area, but all dedicated streets are included whether they serve built-up or vacant land. Another factor accounting for individual variations is the location of the municipal boundary in relation to the whole metropolitan area. For example, Newark, New Jersey, comprises only a small part of the northern New Jersey metropolitan complex.

population size regardless of density. In terms of radius, however, the spread between large cities of high density and small cities of low density is less significant than in terms of total area, so that cost factors that relate to radius could be expected to show less difference between large and small cities.

In discussing the application of the data on area and radius in relation to cost of public services, it should be recalled that the cost of many municipal functions cannot be directly related to differences in density. However, the per capita cost of local streets and local utilities will vary with density, but not appreciably with total land area or radius. On the other hand, the costs of major streets, including construction, maintenance, cleaning and the like, will be related to total area and radius because of the longer runs per capita and the resulting greater volume of traffic on any given section. Similar considerations would also increase the costs of trunk sewers, water mains, and refuse disposal for cities of larger area and radius. Fire protection would probably be more closely related to radius than to density or area, at least in cities that are small enough to be served by a single station, since running time from central station to property to be protected is a major factor in determining whether more than one station will be required.

Because of the close relation between density and costs of street and utility services, special attention should be given to this problem. Examination of data from the Bureau of the Census for 1931 and 1942 on operation expenses for highways, including roadway, bridge and tunnel maintenance, snow removal, and street lighting, shows no consistent relationship to size of city in terms of population. On the other hand, expenses for sanitation, including sewers and sewage disposal, street cleaning, and waste collection and disposal do show a consistent relationship, with the cities over half a million population having sanitation expenses 50 per cent or more above those for cities of 50,000 to 250,000 population.²⁴ It should be noted that these figures include only operating expenses. It seems likely, however, that capital costs for similar types of streets, street improvements, and services dependent on them would also be higher per capita for very large cities than for smaller cities, if such cities were to have comparable densities and comparable facilities in terms of carrying traffic loads and providing for parking needs.

From data on existing cities, it is difficult to determine to what extent increasing city densities could actually lower per capita costs of streets and street services. Most cities have streets acreages varying between 25 and 35 per cent of their developed area, and between 10

24. See Appendix Tables B-4, B-5.

and 25 per cent of their total land area, depending on how much of their street frontages are serving vacant lots either scattered throughout the built-up sections or lying in unbuilt or sparsely built subdivisions. Turning to street acreage per 100 population as a rough indication of per capita costs for streets and street services, it appears, as would be expected, that such relationships depend more on density than on city size. For cities of from 50,000 to 500,000 population, area in streets and alleys varies from about one to three acres per 100 population. Smaller cities, which are generally less densely built, tend to have higher street acreages per capita.²⁵ Careful studies would be necessary, however, to determine to what extent less area per capita in densely built cities would be offset by the need for heavier and wider pavements and more expensive types of other street improvements. Quite obviously the cost of streets *serving residences alone* will be much higher for the less dense cities. When adequate allowance is made for streets serving nonresidential land, however, the conclusion is not so clear, and would vary a great deal with the type and amount of such nonresidential land to be served and the type and design of streets and street improvements that would be adequate to serve these nonresidential land uses.²⁶ Although general studies in this field would be useful as guides to planning for street efficiency, the conditions and problems of each city are so diverse that specific studies for each city or metropolitan area are the only sound guides for planning in individual cases.

In summary, this section indicates that cities of over a half million population have higher municipal costs and higher densities on the average than smaller cities. For most efficient operation of most municipal functions, it appears that a population of *at least* 50,000 is required. It is possible that considerably larger cities may be almost as efficient as cities of 50,000 population, particularly with efficient city layout and careful administration. Available studies, however, do not show to what extent densities and to what extent other factors are responsible for the higher governmental costs in the large cities. The exact role played by densities in regard to municipal costs can be determined only by careful studies considering cities of various sizes, densities, and design patterns. Cost relationships could be set up between each type of municipal service and factors of population size, total area, and radius. The comparative efficiency for variations in each factor could then be computed

25. See Table B-8. Statistics were also examined for many individual cities to determine ranges and relationships. Very few medium-sized cities have less than one acre per 100 population in streets, while a somewhat larger number, particularly those with large vacant areas, have more than three acres of street per 100 population.

26. Obviously, large parks and airports would require little street expenditure per acre, whereas densely built commercial and some industrial sections would require very heavy street expenditure per acre.

and density and size ranges established within which most municipal functions could be operated at minimum cost. Such theoretical studies could be used as general guides, but each city would still have to make its own studies related to its own local conditions.

CONCLUSIONS

The preceding sections have served to suggest the contribution that planning, based on careful studies of densities and patterns of urban development, could make in improving the long-term efficiency of local governmental services, particularly in regard to street and sanitation functions and, perhaps in a less direct fashion, in regard to fire and police protection. Improved urban design could aid in lowering the cost of such services over a period of years, the resources thus saved being used to lower tax rates or to provide more adequate services in such fields as recreation, health, education, or housing.

In summary, consideration is first given to problems of density within each of several specific ranges of density and housing types that offer different qualities of living environment. For each general range, there are certain patterns and levels of density that will result in minimum public service costs.

For example, with very large individual lots, perhaps of one acre or more, each house could provide its own sewage disposal by means of septic tanks.²⁷ Local roads could be paved on light gravel base to a width just adequate for two cars to pass safely. No curbs, and only one or no sidewalks would be necessary, with grassy shoulders and perhaps grass-covered ditches providing drainage and foot-walk space. If household water is drawn from individual wells, lots could be of any desired size above the minimum, providing that road frontages were not excessive. If city water is provided, lots as close to minimum size for septic tanks with frontages of perhaps 125 or 150 feet²⁸ would cut water service costs to a reasonable figure. No local parks would be required, and playgrounds would be necessary only in connection with schools.

When density is increased to the point where sanitary sewers are required, however, the two-family row- or group-house type of development would make for lowest public service costs for individual house development. Street pavements still might be relatively narrow, particularly for short cul-de-sacs or loop streets, but curbs, gutters, and sidewalks on both sides of the street would be required in most cases. Row or group houses would cut the length of streets, street improve-

27. The minimum size of lot would depend on subsurface conditions.

28. At one house per gross acre, the lot size would be roughly 125 by 300 feet or 150 by 250 feet.

ments, and utilities per dwelling to a minimum for individual house type of development.²⁹

Public service costs in apartment areas appear to be generally lower per capita than in neighborhoods of detached or group houses. Sufficient evidence is not at hand, however, to justify more than very tentative judgments in regard to the comparative effects of low- and high-density apartments on public service costs. Nevertheless, it does seem probable that beyond a certain point, high densities will result in more expensive public services than low-density apartments. At what point these costs begin to rise appreciably, however, is not clear.

A generalized theoretical study of this problem based on various neighborhood densities, standards, and designs would be well worthwhile. Such a study need not assume only one type of building throughout an area, but might also be extended to show how a given density could be built as a mixed neighborhood of houses and apartments of various types in varying proportions. Cost data should be included not only for streets and street services but also for construction and operation of all other public facilities to serve the area such as schools, playgrounds, parks, fire, police and health services, and the like. By inclusion of these data in the form of detailed tables, formulas, or charts, a theoretical study of this type could be presented in such form that it could be applied to any given community or area by the substitution of the appropriate local cost factors, including land costs.

This type of study could then be used by any community, whether a central city or a satellite town, to estimate the total capital and annual expenses that it would assume per new dwelling built on vacant land. At the same time, studies of obsolescence of existing public facilities in possible redevelopment areas could be used as a basis for estimates of the cost of providing adequate services in various types of redevelopment projects. Thus a cost analysis could be carried out for new facilities on vacant low-priced land as compared with redevelopment of old areas, including the cost of bringing existing public facilities up to adequate standards, the foreseeable costs of replacing other public facilities now nearing the end of their useful life, and the write-down on land value necessary to attract private builders. If both the redevelopment areas and the new development areas were within the same municipal

29. It is not implied that detached houses may not be more desirable than groups, but merely that detached houses will be more costly from the point of view of public services. Reliable studies indicate that capital cost of public improvements per dwelling decreases rapidly as density increases from two to twelve dwellings per acre. Twelve houses per gross acre (the familiar prewar British standard) is an efficient and livable density for group houses. As density is increased beyond this point the savings in capital cost of public improvements per dwelling are much less. Costs for operation and maintenance of streets and utilities are not available on a similar basis, but it seems very likely that they would follow the same general pattern.

jurisdiction, it would then be possible to formulate a balanced program of redevelopment of old areas and new building on vacant land in such locations and proportions as to result in the lowest public service costs. On the other hand, as would very often be the case, if redevelopment areas were in a central city and new building areas (or redevelopment areas of premature subdivisions) were in suburban towns, a complicated interjurisdictional metropolitan problem would arise. Such a situation points to the need for adequate metropolitan-wide studies to determine a development program in the best long-term interests of the metropolitan area as a whole, as well as in the interests of the several municipalities involved.

The broad scope and complex nature of the studies proposed may be so great as to appear at first glance to be too costly or too involved to be worth while undertaking. Neither the factors of cost or of difficulty should be underestimated. Nevertheless, our medium-sized and large cities and metropolitan areas are multi-million- to multi-billion-dollar enterprises whose operations involve the welfare and pocketbooks of tens of thousands to millions of people. Few of our larger private enterprises would embark on capital investment programs of many millions of dollars without the benefit of broad research to insure that this money was being wisely invested. Similarly, our city, state, and federal governments should not invest large amounts of the taxpayers' money without careful research to determine the most efficient programs of development.

Furthermore, many of the apparent research difficulties may be due not so much to inherent complications as to our general unfamiliarity with the type of study required. With competent direction at the top and by enlisting the aid of thoroughly trained technicians in the various fields involved, the best patterns, procedures, and methods could be developed so that useful results could be expected on relatively moderate research budgets.

APPENDIX B

TABLES AND NOTES ON COSTS OF PUBLIC SERVICES IN VARIOUS URBAN PATTERNS AND DENSITIES

TABLE B-1

ESTIMATED MAINTENANCE EXPENSE AND REVENUE FOR THREE AREAS PROPOSED FOR ANNEXATION TO GREENSBORO, NORTH CAROLINA*
(In thousands of dollars)

	Bessemer	Pomona	Hamilton Lake
Population, 1948.....	\$3,200	2,550	1,135
Assessed value, 1949.....	\$3,500†	\$2,500	\$2,400
Maintenance expense			
Street maintenance, cleaning, and garbage removal.....	\$ 44	\$ 41	\$ 35
Fire protection.....	55	54	55
Police.....	16	15	15
Other.....	73‡	14	9
Total maintenance expense.....	\$ 188	\$ 124	\$ 114
Expected revenue.....	53	37	36
Net deficit.....	135	87	78

* From Randy Haskell Hamilton, *Report on Annexation, City of Greensboro and Environs*, Department of Planning, Greensboro, N.C. (mimeo) July 1, 1949.

† Includes \$1,500,000 assessed value of two large industries.

‡ Includes water service to be provided by the city.

TABLE B-2

COST OF PUBLIC IMPROVEMENTS FOR COMPLETE 200-ACRE NEIGHBORHOODS OF VARYING DENSITIES AND STREET PATTERNS*

	DWELLINGS PER GROSS ACRE	PERCENTAGE OF AREA FOR			COST OF PUBLIC IMPROVEMENTS PER DWELLING†
		Traffic	Recreation	Building Lots	
Detached houses					
Gridiron streets.....	6.5	27	13	60	\$547
Irregular streets					
Single building line.....	6.5	23	17	60	495
Triple building line.....	6.5	17	23	60	427
Mixed houses and apartments‡					
Irregular streets.....	10.25	17	23	60	252

* Adapted from President's Conference on Home Building and Home Ownership, Vol. I, *Planning for Residential Districts* (1932), pp. 116, 118. These same data are also given in Thomas Adams, *Design of Residential Areas* (Cambridge: Harvard University Press, 1934).

† Includes cost of streets, sewers, drainage, street lights, parks, and footwalks.

‡ 40 per cent detached, 11 per cent semidetached, 49 per cent multi-family.

TABLE B-3

ESTIMATED PUBLIC IMPROVEMENT COSTS PER PERSON AT VARYING DENSITIES FOR REDEVELOPMENT OF A 160-ACRE TRACT IN EAST HARLEM, NEW YORK*

Percentage of Net Residential Land Covered by 6-Story Apartments	Persons per Net Residential Acre	Public Improvement Costs Including Transit (dollars per person)
68.....	731	\$163
50.....	540	119
40.....	432	96
30.....	324	95
20.....	216	98
10.....	108	110

* F. Dodd McHugh, "Costs of Public Services in Residential Areas," *Transactions of the American Society of Civil Engineers*, CVII (1942), 1443.

Data computed for higher and lower densities than those shown in this table indicated rising public improvement costs in both cases.

TABLE B-4

PER CAPITA EXPENDITURES OF MUNICIPALITIES BY FUNCTIONS, BY CITY-SIZE GROUPS, 1931*

City-Size Groups	All General Departments	General Government†	Police	Fire	Health and Sanitation	Highways	Welfare	Education	Recreation
500,000 and over	\$56.38	\$5.42	\$6.50	\$3.33	\$5.44	\$4.40	\$5.96	\$18.62	\$2.07
300,000-500,000 . . .	50.76	4.00	4.75	3.78	4.58	4.58	5.80	17.59	1.85
100,000-300,000 . .	36.90	2.00	3.24	3.44	3.04	4.95	2.28	15.89	1.26
50,000-100,000 . . .	35.18	2.05	2.95	3.16	2.99	2.83	1.88	16.68	1.08
30,000-50,000 . . .	33.89	2.11	2.54	3.05	2.45	3.08	1.99	16.03	1.06

* Adapted from National Resources Committee, *Urban Government* (Washington: Government Printing Office, 1939), Table 21, p. 33. For cities of 300,000 population and over, expenditures include pro-rata costs of county government, and therefore are not strictly comparable with data for smaller cities.

† Includes general legislative and administrative expenses that cannot be allocated to specific functions.

TABLE B-5
MUNICIPAL EXPENDITURES FOR OPERATION PER CAPITA, BY FUNCTIONS, BY POPULATION SIZE GROUPS, 1942*

TYPE OF EXPENDITURE	EXPENDITURES PER CAPITA (IN DOLLARS)								
	1,000,000 & over	500,000- 1,000,000	250,000- 500,000	100,000- 250,000	50,000- 100,000	25,000- 50,000	10,000- 25,000	5,000- 10,000	2,500- 5,000
Total operation.....	\$49.58	\$45.88	\$30.41	\$28.77	\$26.23	\$25.52	\$17.12	\$13.29	\$11.02
General control.....	4.28	3.54	2.32	2.16	2.26	2.30	2.06	1.97	1.85
Public safety.....									
Police.....	6.71	5.80	3.80	3.57	3.37	2.89	2.34	2.06	1.64
Fire.....	3.68	3.79	3.38	3.45	3.29	2.89	1.88	1.34	.97
Other.....	.70	.57	.41	.38	.45	.44	.21	.18	.19
Highways.....	2.40	3.01	2.34	2.27	2.83	2.98	2.92	2.98	2.80
Sanitation.....	3.30	3.03	2.35	2.20	2.02	1.73	1.41	1.21	.94
Health.....	.72	.98	.80	.71	.62	.54	.65	.46	.22
Hospitals.....	2.96	3.86	1.86	1.12	.89	.49			
Public welfare.....	9.76	5.60	2.73	2.60	2.15	2.20	.87	.27	.15
Correction.....	.67	.75	.18	.10	.03	.08	—	—	—
Schools.....	11.88	10.87	7.84	7.26	5.43	6.41	2.89	1.23	.97
Libraries.....	.52	.78	.50	.54	.41	.39	.32	.27	.21
Recreation.....	1.31	2.10	1.43	1.30	1.13	.91	.64	.50	.39
Miscellaneous.....	.69	1.20	.47	1.11	1.35	1.27	.93	.82	.69

* Computed from U.S. Bureau of the Census, *City Finances, 1942, Vol. III, Statistical Compendium* (Washington, D.C. Government Printing Office, 1944), Table 3 and Table 60; *Finances of Cities Having Populations Less than 25,000-1942* (Washington, D.C. Government Printing Office, 1944), Table 3

TABLE B-6

CITY GOVERNMENT EXPENDITURES FOR OPERATION PER CAPITA, BY FUNCTIONS, BY POPULATION SIZE GROUPS, 1947*

TYPE OF EXPENDITURES	EXPENDITURES PER CAPITA (IN DOLLARS)					
	1,000,000 and Over	500,000-1,000,000	250,000-500,000	100,000-250,000	50,000-100,000	25,000-50,000
Total operation	\$55.60	\$53.29	\$35.25	\$34.16	\$30.70	\$29.77
General control.....	4.95	4.43	2.87	2.54	2.50	2.46
Public safety.....						
Police.....	7.75	7.05	4.64	4.26	4.02	3.60
Fire.....	4.40	4.79	3.98	4.03	3.84	3.54
Other.....	.60	.59	.38	.41	.35	.32
Highways.....	2.71	3.24	2.91	3.11	3.23	3.62
Sanitation.....	4.24	4.28	3.25	3.03	2.70	2.58
Health and hospitals.....	5.07	6.48	3.34	2.42	2.14	1.47
Public welfare.....	8.50	5.98	2.60	2.64	1.88	1.76
Correction.....	.75	.97	.29	.09	.02	.04
Schools.....	13.17	10.29	7.70	7.64	6.10	7.16
Libraries.....	.70	1.01	.67	.61	.56	.51
Recreation.....	1.71	2.85	2.03	1.81	1.66	1.51
Miscellaneous and unallocable....	1.05	1.33	.59	1.57	1.70	1.20

* Computed from U.S. Bureau of the Census, *Compendium of City Government Finance in 1947, City Finances: 1947, No. 2* (Washington: Government Printing Office, 1949), Table 4. Cities classified by size groups according to 1940 population. Per capita figures computed on the basis of estimated population, January 1, 1948, from *Sales Management* (May 10, 1948), as prepared by Econometrics Institute.

Figures include only expenditure by city governments proper. Expenditures by special districts such as school boards, park districts, sewer districts, and the like are not included.

TABLE B-7

DENSITY OF CITIES BY POPULATION SIZE GROUPS, 1940*

POPULATION SIZE GROUP	NUMBER OF CITIES	PERSONS PER SQUARE MILE OF TOTAL LAND AREA†		
		Arithmetic Mean	Range	Lowest
1,000,000 and over.....	5	13,051	24,933 (New York)	3,356 (Los Angeles)
500,000-1,000,000 ..	9	12,919	16,721 (Boston)	10,800 (Washington)
250,000-500,000 ..	23	6,432	21,061 (Jersey City)	2,480 (New Orleans)
100,000-250,000 ..	55	5,381	24,921 (Somerville, Mass.)	1,622 (Duluth)
50,000-100,000 ..	105	5,581	50,115 (Hoboken)	1,165 (St. Petersburg)
25,000-50,000 ..	200	3,403	35,854 (West New York, N.J.)	424 (Concord, N.H.)
All cities	397	6,753	50,115 (Hoboken)	424 (Concord, N.H.)

* From Bureau of the Census, *City Finances, 1942*, Vol. III, pp. 200-209.

† For purposes discussed in this monograph, figures on persons per square mile of *total* municipal area should be used with caution. They reflect, of course, the amount of vacant land, which varies substantially from city to city, as well as densities of residential development and the areas of nonresidential land uses, which also vary markedly. Some evidence indicates, however, that the proportion of the total municipal area that is vacant does not vary greatly from cities of one size group to another. In dealing with most of the problems outlined in this monograph, persons per square mile of developed area is a more useful unit of measurement. See Table B-8.

TABLE B-8

AVERAGE DENSITY AND STREET ACREAGE PER ONE HUNDRED POPULATION FOR FORTY-EIGHT SELF-CONTAINED CITIES BY SIZE GROUPS*

POPULATION SIZE GROUP	NUMBER OF CITIES	PERSONS PER SQUARE MILE OF			STREETS AND ALLEYS		
		Total City Area	Land Area	Developed Land Area	As Percentage of Total City Area	As Percentage of Developed Area	Acres per 100 Population
150,000 to 850,000	11	7,287	7,419	10,464	18.8	27.0	1.65
50,000 to 150,000	20	5,175	5,264	8,853	19.2	32.9	2.38
Less than 50,000	17	3,379	3,394	6,645	16.4	32.3	3.11
All cities	48	6,007	6,103	9,519	18.7	29.6	1.99

* Tabulated and computed from Eldridge Lovelace, "Urban Land Use—1949" in *Journal of the American Institute of Planners*, Vol. XV, No. 2 (Summer, 1949), and supplementary data supplied by Mr. Lovelace. Data from land-use surveys by Harland Bartholomew and Associates made between 1928 and 1947.

Population figures used are estimated population at date of survey. St. Louis (pop. 821,960) is only city of over 500,000 population included. Smallest city surveyed is Williamsburg, Virginia (pop. 3,942). Total city area includes "river area." Developed area excludes vacant land but includes all dedicated streets whether serving developed or vacant land.

NOTES ON STUDIES OF COMPARATIVE COSTS OF LOCAL GOVERNMENT IN NEW YORK STATE AND MASSACHUSETTS

Two studies that compare the over-all cost of public services in cities of different size, one for local governmental jurisdictions in New York State and the other for cities and towns in Massachusetts, deserve attention. Since both of these studies are confined to single states, it may be assumed that somewhat smaller differences in levels of service would be encountered than if they compared cities in different states or regions.

The New York State study was carried out by Donald H. Davenport and its conclusions summarized in tabular form were commented on by the author as follows:¹

There are two interesting facts brought out by this table. First there are wide variations in costs in all groups. Some of the extremely small localities have costs as large as those of any but the very largest cities, while some of the medium sized cities have costs much lower than those of the smaller towns.

Evidently some factors² other than population must be sought for a complete explanation of the variation in relative costs of the different municipal units.

The second interesting fact brought out by this table is seen when attention is focused upon the central tendencies in each group. It appears that communities under 500 in population have a tendency to operate at costs which are higher than the costs of any localities except those containing more than 15,000 inhabitants. The lowest costs are enjoyed by localities between 1,500 and 2,000 in population. Localities between 2,000 and 15,000 have practically the same per family costs, but from 15,000 on, the tendency is for costs to be constantly greater. In

1. Donald H. Davenport, *Report of Commission of Housing and Regional Planning on Cost of Government, Land Value and Population* (Albany, N.Y.: The Commission, 1926), p. 60.

this later (*sic*) group, it is evident that as population increases the per family burden also increases.

3. Later studies will develop this idea.

Unfortunately, this study included only a few jurisdictions of over 40,000 population, so that no conclusions can be drawn concerning the relative costs among large cities.

Roughly similar conclusions may be drawn from data on Massachusetts municipalities compiled by Morris R. Lambie. Very wide differences in per capita charges against revenue² were found in each population group. However, taking the municipalities with median per capita expenses in each population group, highest per capita current expenses were recorded for the very small towns, and lowest expenses for towns of 5,000 to 10,000 population. In each successively larger population group, per capita expenses increased, with the median city in the 50,000–200,000 group having expenses approximately 50 per cent higher, and Boston (population 770,000) almost double that of the median city in the 5,000–10,000 population class.³ In regard to the significance of these figures, Mr. Lambie points out that many qualifications must be made, including differences in levels of service, and differences in the need for various services in municipalities of various types including resort towns, residential suburbs, industrial and commercial cities of various sizes and types. The device of reducing all data to per capita figures is also questioned because the year-round resident population of resort towns does not reflect the transient summer populations. Similarly the resident population of industrial and commercial cities does not account for the expanded daytime population due to commutation from nearby areas.

2. Charges against revenue include debt service and expenses for public service enterprises, but do not include outlays financed by long-term borrowing.

3. Morris R. Lambie, *Experiments in Methods of Municipal Analysis* (Bureau for Research in Municipal Government, Harvard Graduate School of Public Administration, December, 1941), pp. 246, 251.

CHAPTER IV

BROADER CONSIDERATIONS IN THE EFFICIENCY OF URBAN PATTERNS AND DENSITIES

PREVIOUS chapters have discussed the efficiency of urban densities and patterns of development from the point of view of the individual house or housing project and the provision of municipal services. For the individual house or housing project, the criteria of efficiency are the lowest cost of land, improvements, building construction, operation and maintenance—all consistent with certain predetermined standards. For the municipality, the criterion of efficiency is the lowest cost of providing public services of specified types and levels of service.

The main purpose of the present chapter is threefold. First it suggests methods for determining the patterns of density and design for redevelopment areas that will be most efficient from the point of view of both residential development and local public services combined, drawing on material in chapters ii and iii. Next it will consider the efficiency of other urban activities, particularly industry, commerce, and transportation, as their costs may be affected by relatively centralized or decentralized locational patterns. Finally, it will take up the problem of an integrated appraisal of the efficiency of the urban organism as a whole, including all of its many functions.

COMBINED RESIDENTIAL AND PUBLIC SERVICE EFFICIENCIES

As has been pointed out, residential (or housing) efficiency and public service efficiency are measured by two different sets of criteria which cannot be always evaluated on the same scale. The efficiency of a housing development is measured in terms of the total costs of shelter and other housing services to the owner or occupant. The efficiency of public services is measured by their cost per family or per person in the area served. In the case of greater residential efficiency, the owners or occupants of the particular project benefit;¹ but in the case of municipal efficiency all the taxpayers of the community benefit. If the focus of at-

1. This will be true for tenants provided that profit margins of the owners of residential real estate remain the same.

tention is the metropolitan area as a whole, in the long run these two benefited groups generally coincide. Since one important item in building operation is municipal taxes, an improvement in municipal efficiency might be reflected in lower taxes and eventually slightly lower rents.²

Similarly, lower taxes on industrial and commercial properties should ultimately be reflected in lower costs of doing business and, assuming free competition, in slightly lower prices to the consumer. Under present inflationary conditions, however, the pressure to pay higher salaries to public servants and to improve public services is likely to preclude the immediate possibility of lower taxes.

The rather dismal outlook for an immediate lowering of rents through lower real estate taxes, however, should not be interpreted as an indication that somewhat lower municipal costs achieved by means of more efficient densities and patterns of urban development are inconsequential. The results of the gradual development of these patterns will be cumulative. Small efficiencies achieved in the urban pattern here and there will have a snowballing effect over a period of years. The importance of long-term results should not be minimized.

Nevertheless, in the actual working out of a redevelopment program, short-term as well as long-term considerations will influence very greatly the location, density, and design of the initial projects. Data presented in chapters ii and iii indicate that, for both residential and municipal efficiency, very high and very low densities will generally result in higher costs than densities in the middle ranges. In some cases, data prepared for individual redevelopment projects may indicate that the densities required for greatest efficiencies of both types are approximately the same. In other cases, data so far available indicate that the most desirable densities from the point of view of lowest public service costs will be somewhat higher than those necessary to achieve lowest rentals. In such cases, some compromise may be necessary between achieving maximum benefits to the redevelopment area residents through low rentals and maximum benefits to the municipality as a whole through lower public service costs.

As a guide to making a decision as to the point of compromise between these two conflicting interests in any given case, specific data should be computed indicating, for various densities and designs, the expected monthly costs of housing and the estimated costs of public services per capita or per family to be housed. Figure 1, Appendix C, suggests a graphic method for analyzing and comparing such data. On the same density scale, two sets of curves are drawn, one representing per capita monthly costs for housing, and the other representing per

2. Normally, real estate taxes amount to about 10 to 20 per cent of rent.

capita monthly financial charges or debt service for public services. Even from the limited data available, it seems clear that both these curves will often be roughly U-shaped,³ indicating that very high and very low densities result in higher costs than densities in the middle ranges. In so far as considerations of social desirability remain constant, the densities should be chosen at or close to the low points of both curves.

If these low points do not coincide, a judgment must be made as to what extent the tenant and to what extent the municipality should bear the burden of higher costs. As indicated in Figure 1, Appendix C, the possible benefits to the taxpayer and to the tenant are likely to be of quite a different order of magnitude. For example, at the density resulting in the lowest rental, the taxpayer may bear an increased cost of only a few cents. On the other hand, at the higher density necessary to achieve lowest public service costs, rentals may need to be increased by several dollars. In such a case, it would seem best to select the density affording lowest rentals and to let the community as a whole bear the slightly higher public service costs. Such a decision in favor of the lower density would also afford superior amenities and social standards. In addition, a lower income group in the housing market would be benefited and, in some circumstances, investment capital might be more easily attracted because of the lower risk of vacancy.

On the other hand, conditions of municipal finance in the locality may indicate that greater weight should be given to lowering the cost of public services. This would be the case when tax rates are very high, additional bonding capacity is limited, and other sources of revenue are difficult or impossible to obtain.

Finally, the long-run objectives of achieving more socially desirable urban patterns and densities often may be given greater weight than considerations of either maximum residential or municipal efficiency. In any event, comparing these two types of efficiency in specific terms will aid in making important decisions on the basis of factual analysis rather than vague hunches or partially substantiated opinions. At the risk of too much repetition, however, it should be emphasized that analysis of such facts is only one aid or element in the decisions that must be made.

The type of analysis indicated in Figure 1 is also extremely useful from another point of view. It points out clearly that policy in regard to writing-down land costs is one of the most important factors in determining the density of housing development. It also affects materially

3. As land costs rise, this relationship may be considerably distorted. See also the notes on Figure 1 in Appendix C for other qualifications and limitations of this method of analysis with existing data.

the cost of public services, particularly those requiring large land areas, such as parks, schools, and streets. In theory, land costs in urban redevelopment projects are to be written down to a fair use value for the type and density of development. Obviously, the use value of land for high-density apartments is greater than that for low-density housing. At the same time, high-density apartment development will require a different proportion of land in public uses, such as parks, schools, and streets. The policy used in determining the use value of land for public purposes may considerably alter the efficiency curve. The amount of write-down in land costs should also be carefully considered as it affects the net cost of a project and its distribution between federal grants and local contributions.

Considered in the abstract, such questions appear extremely involved and often baffling. As a matter of fact, however, the financial effects and the distribution of subsidy costs and benefits can be fairly easily estimated for different densities and different land cost policies once an adequate over-all form for such analysis has been established as suggested earlier in this monograph. With the financial effects of different policies clearly set forth, much sounder decisions as to land cost policy and its specific application to a given project can be reached.

OTHER FACTORS AFFECTING URBAN EFFICIENCY

In addition to efficiency of residential building and of municipal services, many other factors enter into over-all urban efficiency. Some of these efficiencies would be reflected in lower costs to the consumer, others in lower costs of production and distribution, which in the long run should also ultimately be reflected in lower prices to the consumer. It would be a task beyond the scope of this monograph to indicate all the fields in which rearrangement of urban densities and patterns could lower costs. Rather than attempting a complete coverage,⁴ this chapter will indicate some of the more significant aspects of the urban complex, not so far considered, where efficiencies might be improved by proper urban densities and patterns. More specifically, discussion here is centered around industrial and commercial areas—their own internal densities of employment (daytime population) and building development, their distribution over the metropolitan area, and their relationships to densities and patterns of residential development.

In many cities the densities and patterns of industrial and commercial areas may assume as great significance in urban redevelopment

4. Private local utility services such as electricity, gas, and telephone are not specifically discussed. In general, however, the efficiency curves of these private utilities in relation to density are likely to be generally similar to those for publicly operated utilities such as water and sewer service.

programs as those of residential areas. For example, the slum and blighted areas most in need of redevelopment are frequently found bordering the downtown commercial district or adjacent to fingers of industrial areas extending out along railroads or waterways. Frequently, there are transitional areas of intermixed industrial, commercial, and residential uses, which are blighted partly because of this intermixture. In other cases, industrial and large commercial uses may be scattered helter-skelter throughout the areas ripe for redevelopment. The problem of redevelopment involves not only the question of what to do with existing manufacturing, warehousing, and similar establishments, but also the question of how much of the redevelopment area should be assigned to industrial and commercial functions. Such questions can be decided only within the framework of a broad plan for industrial, commercial, and oftentimes transportation functions, particularly railroad lines, yards, and related facilities.

These broad plans must be based on general appraisal of the industrial and commercial future of the metropolitan district, estimates of the land needed for such development, and fairly specific determination of how much industrial and commercial land should be provided in the inner parts of the city. Will the efficiency of the various types of present and expected future industrial and commercial operations demand a considerable degree of centralization or will some of the retailing and a large share of the warehousing and manufacturing functions operate more efficiently in outlying locations?

These questions cannot be answered in any general or superficial terms. The answers depend on factors that vary from city to city and for different types of manufacturing and commercial enterprises within any city or metropolitan area. Furthermore, relatively few individual firms have accurate information on the type of location in which they would operate most efficiently. Given the city structure as it is, its present pattern of transportation facilities for freight and for passengers, the existing location of commercial and industrial enterprises, and present conditions in the real estate market including land values, supply of existing commercial and industrial structures and building costs, an individual firm might make one choice in regard to staying in its present location or moving part or all of its operations to a new location, either central or outlying. However, a change in transport facilities, in land values, in availability of sites or existing structures might lead to quite a different decision.

For example, a new express highway system providing faster and less costly movements of freight between the center of the city and outlying areas, or between the center of the city and other cities, might pave the way for a considerable movement of certain types of industrial func-

tions to less costly outlying sites. In such locations, large tracts of land could be obtained and developed for most efficient handling of particular industrial process in spacious single-story structures with adequate loading and unloading facilities and with large areas for parking of workers' cars. On the other hand, the express highway system, if coupled with expanded downtown parking facilities, might make unnecessary the development of large outlying retail outlets, or conversely might make an outlying location for a department store with a large space for free parking as desirable as a central location.

EFFICIENCY OF INDUSTRY IN VARIOUS PATTERNS AND DENSITIES

This section deals with one aspect of the relations of industrial location and relocation to urban redevelopment, which another monograph of the Study explores more thoroughly in the light of available recent facts on industrial employment and building. More specifically, this section focuses on problems of the efficiency of various industries in outlying as compared with central locations in the metropolitan land-use pattern.

One of the major factors cited as an important reason for the selection of an outlying rather than a central site is the availability of large tracts of land at relatively low prices. The necessity or desirability of a large site for a specific manufacturing concern frequently means that it is a *low-density* industry; in other words, that the technology of the manufacturing process requires, or is more efficient in, a single-story rather than a multi-story building or that considerable ground level space either within or outside of the structures is required for storage or to facilitate receiving of materials or shipping products by truck, rail, or water, or for parking of workers' cars.⁵ Conversely, a *high-density* industry would generally be housed in a multi-story structure covering a large portion of the site. This type of density, then, might be measured in terms of the ratio of the total floor area of the buildings to the area of the site. Incidentally, it should be noted that manufacturing technology, including the use of heavier and more complicated machinery and equipment and assembly-line methods of production, is tending toward lower density requirements for many industries.

Manufacturing density may also be measured in terms of the number of workers per acre of site. This measurement assumes that for any specific industry the production process requires, or is more efficient

5. In many cases, a large site may be needed primarily because of the large size of the plant or because space is desired for future expansion to a larger-sized plant. Thus, relatively high-density industries, if of great size, might require large sites which are more easily obtained in peripheral locations.

for, a given number of workers in relation to the amount of machinery, equipment, and floor space. For many purposes, and particularly for industrial planning for land needs on a city or metropolitan area basis, or for planning large industrial districts, density measurements in terms of "workers per acre" are more convenient than those in terms of "floor area ratio."

Considering, then, the amount of floor space per worker, the desirability of one-story or multi-story buildings, and the needs for open space on the site, the most efficient densities for various industries may vary from a few workers per acre for such industries as petroleum refining or steel making, to a hundred or more workers per acre for such industries as clothing manufacture or small assemblies requiring much hand labor. Considerable research is required to assemble data on the most efficient densities for various types of industries. In some cases, experience may show that the efficiency of the production process would not vary greatly over a considerable range of densities.

An industrial land planning program for a metropolitan area, then, might start with an estimate of the expected or desired number of workers in various types of manufacturing industries. The industries covered by these estimates, of course, should include all of the larger industrial employers and land users in the locality. These industries might then be grouped into perhaps three to six categories in terms of their average densities for efficient production. The aggregate future industrial land needs could then be computed. Allowance should also be made for flexibility in plant design, for plant expansion, and for auxiliary needs such as storage, transfer of goods, and automobile parking.

Following determinations in regard to densities and aggregate land needs, the next problem is the most efficient locational pattern of industry in the metropolitan area. Obviously nuisance industries should be located so that their smoke, dust, fumes, odors, and noise will produce a minimum of adverse effects on residential, commercial, cultural, and other industrial functions. In large part, however, the optimum locational pattern will be that which minimizes *transfer costs*.⁶ Some industries will require or desire direct access to rail or water transport. A few, such as airplane production, will require an adjacent airport. An increasing number of industries may be satisfied with ready access solely to fast trucking routes.

Many industries will be more efficiently located if adjacent or very close to those supplies or firms from which they obtain a substantial portion of their raw materials, or to which they sell a large share of

6. It should be noted that whereas efficient industrial densities are largely those that minimize production costs, an efficient pattern of industrial location within a metropolitan area is largely one that minimizes transfer costs.

their products. For example, steel fabricators and steel-making plants might find adjacent locations mutually beneficial. Other industries may want locations convenient for their customers. For example, a foundry and machine shop that does jobbing and repair work for many customers needs a location easily accessible to its clientele. The women's clothing industry in midtown Manhattan benefits from being close to the large department stores and the fashion designers. Still other industries like to be close to repair or commercial services that are important to their efficient functioning. These types of locations minimize transfer costs, particularly those that are borne by the manufacturer or by those to whom he sells or from whom he buys.

Another type of transfer costs, a type that is not borne directly by the industries concerned, has to do with the daily movement of workers to and from their homes. The cost and time of these movements are borne partly by the individual workers and partly by the community as a whole, which must provide and maintain streets and support transit facilities. Urban passenger transport, whether by private car or by public transit, is generally more expensive in cities of large area than in those of small area, because of the longer average length of haul.⁷ It should be noted that some manufacturing companies give as a reason for remaining or locating at a specific site the fact that it is convenient for their workers. Presumably, labor turnover should be somewhat lower, and the efficiency of the workers on the job higher if they do not spend too much of their time and money getting to and from work.

In periods of relative shortages of labor, the need to recruit and maintain a labor force, particularly when one or more types of special skills are needed, may be a very strong reason for choosing or remaining in a central location in a large and diversified labor pool. Furthermore, industries with fluctuating needs for labor prefer locations where they can easily attract extra labor for their peak operations, and in slack periods throw the workers back into a general pool to find other means of support.⁸ Conversely, plants that maintain a fairly stable level of employment may prefer outlying metropolitan locations or locations in smaller towns where they can attract surplus labor from a smaller labor pool and train and maintain their own permanent working force from those living nearby. In some cases, they may need to import a small number of highly skilled workers. Such workers are more easily attracted if they can be assured of steady work. In general, these observations indicate the importance of the location of workers' housing

7. The efficiency of urban transport is discussed more fully in a subsequent section.

8. This is true both for industries with substantial seasonal variations in employment as well as for those whose employment has varied greatly over the industrial cycle. Lessening cyclical swings in employment, therefore, may reduce this consideration in industrial location and relocation.

in relation to their work places, particularly in a period of short housing supply when there are few vacancies. Since most types of labor are relatively immobile, plants need locations where the desired type of labor can be found, and can be attracted because of adequate and accessible housing.

In general, modern means of urban transportation, including the automobile, bus, truck, and rapid transit, have had a loosening effect on metropolitan patterns of land use. In particular, it should be noted in regard to intra-urban trucking expense that a large share of the cost is attributable to loading, unloading, and waiting at terminal points or on congested streets. Costs are especially high when loads must be handled across congested sidewalks and in crowded or inadequate freight elevators in multi-story buildings. The overhead costs of trucks and the wages of truckers must be paid whether trucks are waiting or moving, and whether moving at low or high speeds. Thus, adequate off-street loading platforms and congestion-free streets can do much to reduce trucking costs. Actual length of haul within a metropolitan area may be a rather small factor in total costs of truck transfer. In fact, a run of several miles on a fast truck route may take no longer than a run of a dozen blocks that are badly congested. Thus, with adequate highways and terminals, which are more easily provided and less costly at lower densities, truck transfer costs can often be considerably reduced even though the average length of haul is greater. This is an important factor that tends toward the spread of industry and commerce in metropolitan areas.

Another factor, which in some areas may make outlying locations more efficient for industry and some types of warehousing and wholesaling, is the ability to obtain sites with alternative means of rail, water, and truck transportation. When relative transport costs for different media change, the plant can take advantage of the lowest shipping cost. In case of strikes or other interruptions of service in one means of transport, goods can be received and shipped by other means.

Still another factor strengthening the general trend toward metropolitan spread is the habit of transacting more and more business by telephone and making greater use of the mails and other fast communication and delivery systems. Thus, lower densities and greater spread of the urban areas may, in many cases, result in more efficient and convenient industrial and commercial operations.

From the foregoing analysis, it is evident that the most efficient location for an individual firm depends on the location of the industries and commercial establishments to which it is linked, its relationship to the homes of its workers, and to the transport and terminal system. Thus, whereas a specific location for a given firm might be less efficient if all

other factors in the city pattern remained the same, that same location might be more efficient if a group of linked industries and commercial establishments moved to it at approximately the same time, or if improved means of transport were made available. This suggests that in many cases greater efficiency might be achieved by planned industrial districts and transport improvements that would be designed particularly to serve a group of complementary industries. Such planned industrial districts can also offer certain economies through jointly shared services of one kind or another.⁹ They could also be planned with reference to existing or planned residential areas to house their workers.

Another factor that may appreciably alter the rate of industrial decentralization in a specific metropolitan area is the urban redevelopment program itself. For example, analysis of past trends suggests that the location of new industrial plants may be influenced more by the desire for large sites, for efficient one-story plant construction, for possible plant expansion, for efficient truck transfer, and for parking of workers' cars, rather than by other possible advantages of outlying as opposed to close-in locations. Thus, if large inlying sites in efficient, attractive, and congestion-free planned industrial districts are made available at low prices, a strong new force may be brought into the industrial real estate market that might slow down or even reverse the probable trend toward decentralization.

Admittedly, the analysis above is in very general terms and accounts for only some of the factors that determine the relative efficiency of manufacturing locations within the metropolitan area. For example, in addition to the considerations in industrial location mentioned in the preceding pages, the available supplies and costs of power, heat, and water should not be overlooked. Sewerage facilities may also be significant. Although their influence has often been exaggerated, relative tax loads must also be taken into account. Like the other factors outlined in this chapter, the importance of these considerations in affecting the distribution of industrial facilities between outlying and central parts of metropolitan districts and between these districts and nonmetropolitan localities will vary from one type or combination of industries to another. This means, of course, that a great deal of detailed study is necessary of the locational desires and needs of individual firms in specific cities to determine the most efficient pattern for the industries of that area.¹⁰

9. See Robert L. Wrigley, "Organized Industrial Districts," *Journal of Land and Public Utility Economics*, Vol. XXIII, No. 2 (May, 1947).

10. Such a pilot study of industrial and commercial firms in the central area of Philadelphia is now being conducted for the Public Roads Administration and other co-operating groups under the direction of Robert B. Mitchell of the Institute for Urban Land Use and Housing Studies, Columbia University.

These local studies should also include consideration of the amounts of land that are needed or desired by those types of industries that will operate most efficiently near the heart of the city, those for which outlying sites are more efficient, and those whose efficiency would probably be about the same in either outlying or close-in locations. These estimates of industrial land needs will reflect the industrial densities found most appropriate for industries preferring each type of location, and the prospects of each type of industry for expansion in the locality. Estimates on the latter point, of course, go back to the planning studies of the economic base of the locality. Based on such studies, more accurate plans can be made for the proper allocation of land for industry in the metropolitan area as a whole and in specific redevelopment areas.

Accurate predictions in this field, however, will be very difficult even on the basis of careful studies of the economics of existing industries and appraisal of the probable impact of technological and other factors on industrial location and land needs. Thus, considerable flexibility in planning for future industrial areas will be necessary so that changes can be made as new conditions develop.

DENSITIES AND LOCATIONAL PATTERN OF NONINDUSTRIAL EMPLOYMENT

In most urban areas, manufacturing employment is often only one-quarter and very rarely more than one-half of total employment. The majority of workers are employed in nonindustrial activities such as retail and wholesale trade, administrative offices, commercial, public, and personal service, hotels, amusements, hospitals, educational, cultural, and eleemosynary institutions. Furthermore, the long-term trend indicates that industrial employment is becoming proportionately less important than employment in so-called service activities.¹¹

11. For the nation-wide distribution of employed and "unemployed experienced workers" in the United States in 1940, see Hicks and Hart, *The Social Framework of the American Economy* (New York: Oxford University Press, 1945), Table IV, p. 80 and accompanying discussion. For the major breakdown in point here, Hicks and Hart give 15.3 million experienced workers (employed and unemployed) in manufacturing, construction, mining, and quarrying—certainly a generous definition of what is commonly termed "industry." Manufacturing alone was 11.5 million. The corresponding figure for transportation and other utilities, wholesale and retail trade, finance and real estate, professional services, other service trades, and government was 23.9 million. For 1950, of course, the totals would be substantially larger but the proportions between them probably would not be very much different.

Somewhat similar breakdowns, with emphasis on the wide variations from city to city, may be found in Ratcliff, *Urban Land Economics* (New York: McGraw-Hill Book Co., 1949), pp. 42-46, and Weimer and Hoyt, *Principles of Urban Real Estate* (New York: The Ronald Press Company, 2d ed., 1948), pp. 85-87 and 107-14.

The economist Colin Clark, who has studied the distribution of employment in many countries, writes in his book, *The Conditions of Economic Progress* (London: Macmillan and Co., Ltd., 1940), "Studying economic progress in relation to the economic structure

Unfortunately, few cities have adequate knowledge of the locational pattern of their nonindustrial employment. Even fewer have adequate data on trends in the location of such employment. Much of it usually is in the central business district, but a considerable share is scattered throughout the area in commercial subcenters, neighborhood stores, and scattered public and private institutions and offices. Many new places of employment are being built in outlying locations, but new buildings are also constantly being built in central locations. Because industrial employment accounts for only a fraction of total employment, studies of locational trends of employment should take full account of nonindustrial as well as industrial activities.

In general, the factors influencing the density and location of commercial and other nonindustrial activities are roughly similar to those for manufacturing. The relative importance of these factors, however, is often quite different. In many cases, transfer costs loom very large. This would be particularly true for wholesale, warehousing, and certain types of commercial service establishments. Retail and personal service businesses are particularly concerned with locations that attract the most customers. Public and private nonprofit institutions are also concerned with locations that are convenient for their clientele and employees.

Since many commercial functions have quite high densities of employment, particularly when housed in multi-story buildings, their land needs are generally considerably less than those for manufacturing.¹² In

of different countries, we find a very firmly established generalization that a high average level of real income per head is always associated with a high proportion of the working population engaged in tertiary industries. Primary industries are defined as agriculture, forestry and fishing; secondary industries as manufacturing, mining and building; the tertiary industries include commerce, transport, services and other economic activities. . . .

"When we examine the trend through time, we find a similar result. In every case we find the proportion engaged in primary industry declining and in tertiary industry increasing. The proportion of the working population engaged in secondary industry appears in every country to rise to a maximum and then to begin falling, apparently indicating that each country reaches a stage of maximum industrialization beyond which industry begins to decline relative to tertiary production. In the U.S.A. this maximum was shown in the Census of 1920 . . ." (pp. 6-7).

In general, the importance of industrial employment and location to problems of urban growth, structure, and planning does not depend so much on the *number* of industrial employees as it does on two other facts: many industries sell most of their product outside the urban center in which their plants are located. Thus they are "town-builders" rather than "town-fillers" in the terminology adopted by Weimer and Hoyt; many industries, also by reason of the purchasing power represented by their wage and salary payments, influence the amount and location of supporting commercial and residential development.

12. For relative amounts of land used for business, industry, and other purposes in different cities, see Harland Bartholomew, *Urban Land Uses*, Harvard City Planning Studies IV, Cambridge, Massachusetts, 1932. Also Eldridge Lovelace, "Urban Land Use—1949," *Journal of the American Institute of Planners*, Vol. XV, No. 2 (Summer, 1949).

addition, it should be noted that many commercial functions, such as warehouses, transport equipment, repair and maintenance, and the like, are frequently located in light industrial districts, and represent a need for land in industrial rather than business districts. Many nonindustrial activities, however, should have relatively large adjacent areas for automobile parking, which often might require as much or more land area than is needed for the buildings themselves. One of the important uses for parts of redevelopment areas may be to provide this needed parking space adjacent to downtown or outlying commercial and institutional centers. Obviously, such parking areas should be properly related to existing street systems and proposed express highways.

Before such allocation of land can be made, however, each city should know much more about the comparative efficiency of central as against outlying locations for its nonindustrial functions. To what extent can some of the functions now performed in the central business district be wholly or partially decentralized to outlying locations without loss of efficiency?¹³ How should highway and transit systems be planned to promote such dispersion so that greater efficiency may be achieved? It has been frequently pointed out that a major cure for costly and wasteful traffic congestion is not more and more expensive superhighways and downtown parking garages, but a rational decentralization of urban functions that can operate as effectively in outlying subcenters as in the central district. The underlying problem is to determine how much decentralization could be accomplished and in what specific categories of activities without hampering the efficient operation of these activities in the long run. Careful studies aimed at answering such questions are obviously basic to planning for rational redevelopment of our cities.

EFFICIENCY OF URBAN TRANSPORT

As previously suggested, a very important element in the efficiency of an urban complex is the cost of moving people and goods within and through the metropolitan area. In large measure, this will depend on the ecological pattern of industry, commerce, residence, public facilities, and private nonprofit institutions. It will also depend, of course, on the pattern, location, design, and operating methods of the transport and terminal facilities themselves. In many ways, the transport system itself will affect the location and efficiency of industry, commerce, and

13. Some evidence indicates that decentralization of certain functions often has preceded and may be more significant in changing urban land use patterns than decentralization of plants or industries. See, for example, *Regional Survey of New York and Its Environs*, particularly Vol. I, pp. 36-37.

residential districts. Basically, the transport system should be designed not only to serve the major land uses as they now exist, but also to promote shifts in the urban land-use pattern in the direction of greater efficiency for the various urban functions.

The over-all efficiency of a transport system is difficult to determine because the savings effected are reflected in lower costs to thousands of different firms and individuals. For example, improved trucking routes that lessen time in transit as well as better terminal facilities that cut down on loading and unloading time and cross-hauling result in savings to thousands of shippers. Shorter average running times between places of residence and places of business reduce the time and money spent by private individuals. Better co-ordination among highway, rail, water, and air transport is reflected in savings in time and money to shippers and to individuals traveling for business or pleasure.

Furthermore, whereas the benefits of shorter and faster hauls accrue largely to private businesses and individuals, many of the costs of improved transport, particularly highway improvements, are borne by the public in general. Because street and highway construction and maintenance consume a considerable proportion of governmental income, it is important that the benefits to the private consumers of transportation services should be commensurate with these public expenditures.

Many studies and reports dealing with intra-urban transport are available.¹⁴ Many of these have been directed toward parts or segments

14. An introduction to the several phases of urban transport may be found in Harold M. Lewis, *Planning the Modern City* (New York: John Wiley & Sons, 1949), Vol. 1, pp. 59–194. An excellent discussion of methods of handling urban traffic problems is found in *Traffic Engineering Functions and Administration*, prepared by a joint committee of the American Association of State Highway Officials, American Public Works Association and Institute of Traffic Engineers (Chicago: Public Administration Service, 1948), particularly the section on need for economic analysis, pp. 108–9, and other sections dealing with economic factors. The section quoted below on anticipated traffic pattern changes (pp. 20–21) is of particular interest.

"It is in urban and suburban areas, however, that future changes in the traffic pattern deserve the most careful consideration. This is a very important matter, because progressive highway transportation improvements can have significant effects in stopping, retarding, or expediting anticipated traffic pattern changes.

"Probably the best and most important example of anticipated change of pattern involves anticipated further decentralization of cities in its three aspects—residential, business, and industrial.

"Automobiles and highway improvements made it possible for residents to move out into suburbs, away from smoke and fumes, where it would be more quiet and peaceful, where they could have a little home, green grass, a garden, and pets. Future highway improvements will certainly increase the important traffic pattern changes being brought about by this type of decentralization. A new radial freeway can be expected to produce very extensive new residential development. Not only do new traffic loads develop, but there is less use of public transportation, especially by those whose place of residence does not get frequent expeditious transit service.

"Decentralization of downtown businesses is something different. Significant traffic pat-

of the subject such as expressways or parkways, central district traffic, public transit, railroad terminals and consolidations, airport locations, harbor facilities, or bus and truck terminals. A number of cities have made more comprehensive transportation studies, particularly of street and highway problems.¹⁵ The extensive studies of this kind indicate the

tern changes must be anticipated in most cities unless effective measures are taken to retain the accessibility and business attractiveness of the central business district. Even then some decentralization will have to be expected, but it will be orderly and moderate. Traffic conditions are not the only reasons for a downtown business moving to a suburb, but traffic congestion and lack of suitable parking places are among the most important reasons, for they greatly reduce the accessibility and hence the value of downtown property for many business purposes.

"Decentralization of downtown businesses is likely to have a disastrous effect on the municipality's tax revenue, because the central business districts generally do what few other districts do—produce more tax revenue than is expended in them. Hence, downtown tax revenue helps other sections. When downtown merchants decide to move outward, they seek room for parking and for a suitable store, with not too many stories. So they seek inexpensive land, and often the location chosen is outside the city's boundaries and not subject to its real-estate tax.

"The third element in urban decentralization applies to industries. In increasing numbers industries are finding that they can be satisfactorily supplied with labor and materials by highway transportation. Hence it is to be anticipated that more industries will leave waterfront and railheads for the more extensive parking and other room, lower taxes, and more pleasant surroundings of the hinterland.

"Each of these three decentralization groups will produce new traffic patterns.

"Another example of anticipated traffic pattern changes in cities relates to public transportation. In most cities, except those of very large population, streetcars are being or have been replaced by busses. With residential decentralization more use of automobiles can be anticipated for the greater number of trips downtown. Even though this method is more costly, many motorists will choose to use their cars because of the many advantages. What future pattern will emerge will be much dependent on what is done about improving public transportation and thus reducing the downtown parking problem. If, for example, the plan of outlying parking lots and shuttle busses looping between a particular lot and downtown is to become common, the traffic pattern in certain areas will be considerably different than if parking facilities are either in the downtown district or within walking distance. Routing of public transportation can have a great effect on important parts of the traffic pattern."

15. Among recent reports of this type are:

A Report to the City Planning Commission on a Transportation Plan for San Francisco, De Leuw Cather and Company, Ladislas Segoe and Associates, November, 1948.

A Tentative Master Transportation Plan, Planning Commission of Baltimore, November, 1949.

The Basis for a Master Transportation Plan, Planning Commission of Baltimore, June, 1949.

Highway and Transportation Plan, Nashville, Tennessee, H. W. Lochner and Company, De Leuw Cather and Company, December, 1946.

Expressway System for Metropolitan Providence, Charles A. Maguire and Associates, J. E. Greiner Company, De Leuw Cather and Company, consultants, 1947.

Cincinnati Metropolitan Master Plan Study, Motorways, City Planning Commission, Cincinnati, January, 1947.

Economic Valuation of the Gulf Freeway, Houston, Texas, City of Houston Department of Traffic and Transportation, July, 1949.

Transportation Survey and Plan for the Central Area of Washington, D.C., J. E.

detailed types of traffic engineering and economic analysis that have been developed in the search for comprehensive programs to handle urban traffic problems. These studies and plans are generally based on surveys of traffic volumes, origin and destination "desire lines," cordon counts and similar data that reflect existing conditions and present land-use patterns. Obviously it is extremely important to locate traffic facilities where they are now needed, as shown by such studies, or where informed judgment indicates probable changes in flows. On the other hand, for purposes of studying the efficiency of various urban patterns and densities, methods for estimating traffic-generating potential must be applied to various radically different city patterns to determine probable traffic flows and to estimate relative costs of urban transport.

As an illustration of one type of study to evaluate the transport economies that could be effected by major shifts in land use, there is suggested below an approach to the problem of reducing the costs, both public and private, of handling the daily movement of workers from homes to work places.

Trafficway design is based on the principle that traffic facilities must be of sufficient capacity to handle the peak load, which generally occurs during the late afternoon rush hours when both workers and shoppers are homeward bound. Obviously, the most efficient method to reduce this traffic peak and traffic flows in general would be to locate places of work and of business, to the greatest extent feasible, within walking distance of homes for their workers. This solution can generally be applied with greater effectiveness in small cities where distances are shorter, where there are fewer employment centers and fewer very large employers, than in large cities or metropolitan areas.¹⁶ When workers shift job locations with some frequency, and when there is a lag in moving home locations because of general housing shortages or to personal or financial considerations, the extent to which workers may move to live closer to their work is problematical. The pattern of such shifts would undoubtedly vary greatly from city to city, depending on such factors as extent of home ownership, suitability of new housing for workers' families near expanding employment centers, general habits

Greiner Company, De Leuw Cather and Company, consulting engineers, October, 1944.

Major Trafficways, Milwaukee Metropolitan Area, De Leuw Cather and Company, 1949.

The Major Street Plan, Wichita, Kansas, Part III, Transit Facilities, Airfields, Harland Bartholomew and Associates, May, 1944.

16. For these and related factors see J. Douglas Carroll, Jr., "Some Aspects of the Home-Work Relationships of Industrial Workers," *Land Economics* (November, 1949), pp. 414-22.

as to moving within the city and many other considerations. When an outlying employment center is established or expands, however, a series of studies over a period of several years indicating place of residence of workers and reasons for shifts would aid in estimating the possibilities of reducing traffic movements by this method. Although serious difficulties can easily be foreseen in obtaining comparable results and valid interpretations from studies of this type, the potentialities for improving city patterns and reducing transport costs by locating homes and work places within walking distance are so great that careful research in this area is clearly justified.

Even when urban patterns are designed to encourage walking to and from work, a large proportion of workers, especially in large cities, will use either public transit or automobiles. Because public transit, considering both public and private costs, is nearly always much less expensive than private car transportation, every effort should be made to lay out city patterns so that large portions of them can be effectively served by frequent and expeditious transit. In the largest cities where there are concentrated loads from residence areas to business centers, rapid transit by rail may offer the most efficient means of moving people. If new expressways are designed to accommodate rapid transit rail rights-of-way in center strips, the construction costs of fixed improvements of this type can be minimized. Where rapid transit appears feasible, careful estimates should be made of the range of optimum traffic loads. Residential densities within walking distance of stations may then be encouraged that will generate these optimum loads. Feeder bus lines can also be used to build load, but the inconvenience and time spent in transferring discourages use of public transit for those who must use two or more conveyances for a single trip.

Express bus service, particularly on freeways, offers a mode of public transit suited to serving middle-density residence areas. Careful studies are needed to indicate the residential densities that can support such service efficiently.

Throughout most urbanized sections, there should be densities that can economically support either express bus, streetcar, or local bus service, so that families do not have to depend solely on private cars. When densities fall below that level, advantage might well be taken of generous allowances for spaciousness to enhance living environment.

On the basis of studies of these kinds, individual cities could establish patterns and densities for both residential and nonresidential land that could be expected to encourage walking or use of rapid transit by rail or express bus to and from work. Outlying employment centers that cannot be efficiently provided with frequent mass transit might be served by crosstown as well as radial motorways and adequate parking

space in order to assure expeditious and convenient movements by private car. Also, traffic and related land-use planning for outlying areas should be analyzed to indicate what measure of relief might thus be brought to downtown traffic congestion. Many cities have made extensive studies and prepared plans for costly downtown traffic improvements without adequate attention to how planned land use and trafficways for expanding urban peripheries might mitigate the pressing downtown problems.

Although the journey to and from work is, in most cities, the single largest traffic movement and creates the major peak flows, transport systems must be designed with all other major types of trips in mind, including those for shopping, educational, recreational, or amusement purposes, and for delivery of goods to stores, factories, warehouses, rail, water, and air terminals as well as to homes. Thus many other studies are needed, not only of movements by the separate means of transport, but also of the possibilities of co-ordination of various types of transport for both passenger and freight handling.

Furthermore, it should be emphasized that transport studies ought not to be made only on the basis of the present locational pattern of industry, commerce, and residence, but should also be done in the light of probable and planned shifts in these locational patterns, particularly those shifts that will accomplish greater efficiencies from both an economic and a social point of view. Because of the large public stake in streets and highways, waterways, piers, airports, and the like, public agencies should be expected to take the lead in intra-urban transport studies.

The great variety of modes of intra-urban transport, the specialized engineering and economic problems connected with each, the many possibilities and the complexity of the interrelationships are such that this field of study needs the attention of highly qualified experts. In order to key transport studies into the broad question of patterns of urban development, the first step should be to outline a sound research program and, within the framework of that program, to formulate problems that can be attacked with valid research techniques and reasonable expectation of useful conclusions.

INTEGRATED STUDIES OF URBAN EFFICIENCY

This monograph has outlined in greater or lesser detail the several major functions of urban areas in terms of their efficiency in various possible patterns of location and density. The separate functions may be listed in the order in which they have been mentioned and in the order of greater to lesser detail in the discussion, as follows:

1. Residence buildings and residential areas
2. Public services in residential areas, and in the city and metropolitan area as a whole
3. Industrial activities
4. Nonindustrial activities including commerce and nonprofit private and public activities
5. Urban transport system

As previously suggested, efficiency for any one of these functions cannot be judged on the assumption that all other functions will maintain their existing locational pattern. Although changes in locational pattern occur relatively slowly, over a period of a generation the whole urban pattern may be materially altered. At the same time, technological, financial, and social conditions, needs, and desires are changing, resulting in changing densities for the individual functions as well as changing locational patterns. These changes are all interrelated. For example, residential decentralization tends to promote the growth of outlying commercial subcenters. At the same time, the outlying location of good shopping facilities, particularly if coupled with adequate parking, helps to increase outward movement of residence, especially if industrial and other types of employment are also shifting to the urban peripheries. Finally, good cross-town automobile and transit facilities make such outlying industrial and commercial centers more accessible from other parts of the city. Thus, realistic study of the broader considerations of urban efficiency demands a comprehensive approach to the whole problem.

The basic framework for such an approach to urban efficiency, as well as the most fruitful methods of study, is still in an embryonic stage of formulation. The following paragraphs suggest one type of approach that might lead to useful results.

Several different patterns of urban configuration might be set up including the following four major basic types and perhaps several variations of each:

1. Centralized employment in industry and business, and concentrated high-density residence
2. Centralized employment in industry and business, and dispersed low-density residence
3. Relatively decentralized employment in industry and business, and dispersed low-density residence
4. Relatively decentralized employment in industry and business, and higher-density residence concentrated in satellite towns near employment centers.

In applying the foregoing generalized patterns to any city or metropolitan area, both a long-range theoretical approach and a shorter

range more practical approach are suggested. The long-range approach would ignore, for the most part, present land-use and land-value locational patterns. It would assume, for purposes of the study, the building of almost a completely new city on the site of the old. On the basis of a tentative distribution of future employment in various types of industries, businesses, and noncommercial activities, it would divide employment into those activities that need to be centrally located, those that would clearly require outlying locations, and those that could probably operate as efficiently in outlying as in central locations, provided the transport system were developed to give improved service to outlying areas. Obviously such a classification would require considerable detailed study of the locational needs of the various production, distribution, and service activities within the urban area and those that might be expected in the future. On this basis, two quantified¹⁷ locational patterns of employment could be set up. The first would place those activities that could operate with about the same degree of efficiency in central or outlying locations in the central district, thus conforming to the centralized employment pattern posited in basic types 1 and 2 above (p. 186). The second would place these same activities in outlying locations, and would be used to determine the relatively decentralized employment pattern as posited in schemes 3 and 4.

At the same time, based on different sets of acceptable and relatively progressive standards for densities in different types of residential areas, possible schedules of residential land needs to provide adequately for the expected number and composition of families would be established. These land needs could then be arranged in different generalized locational patterns properly related to the relatively centralized and the relatively decentralized pattern of employment previously established. Thus the residential patterns would be established to complete the four urban patterns posited above. The final step would be to analyze the comparative efficiency of these several patterns, particularly in terms of providing public services, utilities, and transport.

Although somewhat unrealistic in the sense of ignoring investments in existing urban facilities, the outcome of such studies would indicate the relative economic desirability of several possible future patterns, provided that existing investments could be written off at a relatively rapid rate. Moreover, these studies could establish a framework of thinking and a methodology that would be useful for more detailed studies based on the second type of approach discussed below.

This second type of approach would be particularly concerned with the length of future useful life of existing urban plants and structures.

17. That is, for each nonresidential district, the amount or quantity of various activities would be indicated in terms of employment and of land required.

Most of the newer built-up and many of the middle-aged parts of the urban area can look forward to a useful economic life of at least a generation, and, in some cases, for probably two or three generations if certain minor changes are made in terms of street system, parking, transport, playgrounds, parks, schools, and the like, and provided that relatively good maintenance and occupancy standards can be assured. Careful estimates should be made of the desirable and enforceable capacity¹⁸ of the structures in these stable and conservation areas in terms of both residential and nonresidential functions. The capacity of possible and desirable future structures in these areas should also be taken into account. Often, the zoning ordinance as drawn or as proposed for revision will indicate the maximum possible capacity in these areas. In most cities, over and above the capacity of these existing stable and conservation areas, there will be considerable need for new building. The amount of the new building in vacant and redevelopment areas can be estimated both in terms of floor space needed for residence and work places, and in terms of their land needs, assuming several different sets of density standards for the new development. Several possible locational patterns can then be established for this new residential, commercial, and industrial development in much the same fashion as that proposed in the first approach suggested above.

Studies of the efficiency of public services, utilities, and transport for these several locational patterns would take into account the useful length of life of existing, locationally fixed investments in streets, utilities, and transport as well as the need for new investments according to the several possible location and density patterns. Those patterns would be considered most desirable that offered the greatest efficiency in terms of existing investments and also tended to bring about the patterns deemed to be the most efficient from the long-term point of view as shown by studies made with the first approach.

Obviously, the kinds of studies mentioned above would be fraught with many difficulties including judging the relative importance of various economic as well as social criteria; methodology and techniques; and reliability and interpretation of results. These three matters should not be considered entirely separately, but in terms of the relationships among them, and between them and other larger considerations. For example, the relative importance of economic efficiency and higher social standards will depend partly on the future expected income of the residents of the area, and its desirable distribution among all possible expenditures. The desires of the individual consumers as against the needs of the community for publicly provided services must be consid-

* 18. Capacity realizable if reasonable standards of occupancy, safety, sanitation, maintenance, and repair are enforced under local police power ordinances.

ered. With very high incomes, an area could support and probably would desire considerably higher social standards of urban development, even if they could be achieved only at higher cost.

Furthermore, the methodology, techniques, and limits of error in estimating efficiencies of the several urban functions would have to be brought up to a fairly uniform level before sound judgments could be made as to their relative order of magnitude and their relative importance as criteria on which to base decisions. Thus, it would be necessary to pay particular attention to those functions where considerations of locational efficiency have received the least attention. In other words, before a sound structure for determining over-all urban efficiency can be built, the various building bricks that must be put together to make the complete structure must be brought up to a standard of strength and reliability consistent with their use as parts of the larger structure.

In brief, then, a many sided approach to the problem of urban efficiency is required. On the one hand, the criteria, techniques, and methodology for studies of the efficiency of various urban functions must be developed more or less independently. On the other hand, these various pieces must be periodically fitted into the whole efficiency picture to determine the points where the greatest attention must be given to achieving greater precision.

A useful basis on which all efficiencies can be judged on the same scale is their effect in reducing the costs of goods or services to the consumer, or improving their quality. One method of establishing the relative importance of various efficiencies would be to determine, for the urban area under study, the distribution of the consumer's dollar between housing, public services, urban transport, and other major items of expenditure. Preliminary analysis could then be made of the variations in expenditures that might be expected because of various attainable urban patterns and densities. The percentages in possible variations of expenditures applied to the proportion of the consumer's dollar used for various purposes would then indicate the field of expenditure where greatest over-all savings might be most readily achieved. Furthermore, it would indicate the greater usefulness of much more detailed and reliable studies in those areas where larger savings might be expected. From this point of view, the need for efficiency in the densities and design of residential buildings would undoubtedly rank very high. Efficiencies in transport and cost of public services would also be important.

Such studies might even suggest that slightly less efficient patterns of industrial and commercial location could result in considerably larger savings to the consumer in housing and transport costs. As a matter of

fact, government has increased the cost of doing business in order to achieve social goals such as adequate safety, health standards, or more nearly adequate social security payments. Justifiable on a somewhat similar basis would be locational patterns of industry and commerce that, although they slightly increased the costs of doing business, would at the same time yield to the consumer greater savings in terms of urban transport, public services, or housing.

In addition, the wider social and economic advantages of improved living conditions even at slightly higher monetary costs should not be overlooked. To some extent, such improved living conditions may ultimately lead to higher production of goods and services. For example, health and well-being may be enhanced by proper densities, design, and patterns of residential, industrial, and commercial areas, even though the costs of furnishing public services to them may thus be slightly increased. The lessening of family and social tensions and strains and the improvement of health may release greater and more effectively applied energy into channels that will result in increased economic productivity as well as more satisfying social and cultural life. Unfortunately, it is not possible at present to construct an over-all social balance sheet showing how much of an improvement in social standards and services can be justified from a purely monetary point of view. As an interim policy, however, it might be well to devote a certain share of monetary savings due to increased municipal or other types of efficiency to improvements in living environment and in public services that increase the health, safety, educational level, and welfare of the community. At the same time, an attempt should be made to assess the effects of such improvements on economic productivity and on the cost of social maladjustments such as crime, delinquency, and family disorganization.

COSTS AND METHODS OF PROPOSED STUDIES

The studies proposed in this monograph would require the efforts of many research groups in different cities working on their own specific problems, as well as one or more central groups aiding in the exchange of information between localities and carrying on more theoretical and generalized studies. Although the aggregate costs of such studies would undoubtedly be great, the cost to any one research group need not be unreasonably large. Several exploratory attempts may be necessary before worth-while results are achieved. It should be realized, however, that our cities and their public services represent investments of hundreds of billions of dollars, and expenditures for operation and maintenance amount to billions of dollars annually. Thus, the building and

operation of our urban centers, including both public and private activities, represent a considerable fraction of the total economy.

American industry is famous for reducing the cost of manufactured articles through technological improvements and increasing efficiency of plant design, equipment, and management. Every important industry spends hundreds of thousands if not millions of dollars in research, comparing the costs of various designs, materials, and processes in order to determine the lowest cost of manufacture for the most useful articles. To a considerable extent, the greater the amounts spent on research, the more rapidly are improved designs, processes, and products developed. In a competitive business world, it behooves the individual firm to maintain or enhance its competitive position by budgeting adequate sums for research, by hiring the most competent research personnel available, and by insisting on results from research that can be used to improve their products and services. Similarly, if substantial funds were spent on urban research, and particularly on city design, substantial economies could be achieved for the benefit of city dwellers by gradual redevelopment of cities to achieve more efficient patterns and densities.

Securing adequate funds would be much less difficult if convincing argument could be presented for the fruitfulness of results. The productivity of every dollar spent on such studies clearly will depend in large measure on the skill with which the research program is formulated, the quality of the personnel which can be obtained to carry it out, and the use of efficient methodology and techniques.

The studies suggested above require the handling of many complex factors with the possibility of considerable variation in each factor. The amount of computation required to estimate the efficiency of each possible combination of variables may be very large. The problem is analogous to certain problems of military supply lines for a major operation, such as the invasion and occupation of North Africa and western Europe during the last war, or the recent Berlin Airlift. Each of these operations could have been carried out in a great variety of ways in terms of numbers and capacity of ships, planes, and terminals, time required for construction of additional transport equipment and for training of crews, sources and allocation of materials in short supply, and the like. Manpower, equipment, and plant and terminal capacity all had to be meshed together in a pattern that would deliver the greatest volume of supplies in the shortest time. Many thousands of computations had to be carried out to determine the combination of use of various factors which would be most efficient from the point of view of the objectives. Complicated electronic computers, the so-called "machines

that think and remember," were used to carry out these computations quickly and accurately. Once the basic patterns of computation were set up, the machines could produce the answers for any desired quantitative combinations of factors in short order.¹⁹

Similarly, once the many sets of possibilities for urban patterns and densities are set up, and the relations between them expressed by mathematical formulas or integrated sets of tables, these alternatives could be put into the computing system in any desired sets of combinations and their relative economic efficiency quickly determined. The cost of setting up and using electronic computers is such that a large volume of data from several different cities should be made available at one time. These data should be obtained on a comparable basis and set up in identical form. Very careful groundwork and close co-operation between participating agencies would have to be developed by a central research group.

ECONOMIC VS. SOCIAL CRITERIA

Obviously the cost of achieving any particular set of densities, patterns, and social standards will form an important basis for guiding urban development and redevelopment. For example, such a set of complicated computations as proposed above might indicate that the most economic urban pattern was one of concentrated business, industry, and high-density residence. On the other hand, a more dispersed urban pattern might be much more desirable in terms of livability, convenience, and amenities. One set of patterns for the decentralized city might be very much more expensive than the concentrated pattern, and another only slightly more costly. Reference to the probable future economic base of the community and the earning power of individuals would provide some basis for estimating to what extent more costly but more socially desirable urban patterns and densities could be afforded.

Estimates of future productivity and future income in the United States indicate that we can afford in the future a much higher standard of living environment and amenities than is currently possible.²⁰ Since the parts of our cities that are built today will be with us for many years to come, they should represent standards of livability that will not be obsolete within two or three decades. If they are not to degenerate into the slums and blighted areas of the future, they must embody

19. Marshall K. Wood and George B. Dantzig, "Programming of Interdependent Activities," *Econometrica*, Vol. 17, Nos. 3 and 4 (July-October, 1949).

20. See Milo Perkins, "How Rich Can Your Children Be?" *Harper's* (July, 1949), and University of Chicago Round Table, *America's Economic Promise*, Pamphlet No. 608, November 13, 1949. Also Frederic Dewhurst and Associates, *America's Needs and Resources* (New York: Twentieth Century Fund, 1947).

standards of livability that will attract and hold their residents for many years in competition with newer developments. Many investors in urban real estate, particularly large investors in urban mortgages, are well aware of the lower long-term risk when high standards of livability are achieved. Public officials and community leaders need to be particularly sensitive to the long-term implications of urban development and redevelopment from the larger economic as well as the social point of view. Minor efficiencies that can be shown in terms of dollars and cents must be weighed with mature judgment against broader economic and social objectives.

CONCLUSIONS

The problem of the efficiency of urban patterns and densities is a very broad one. It should be approached from the point of view of the effect of different patterns, densities, and designs on relative costs of separate urban functions such as residence, public services, industry, commerce, and transport, and from the point of view of the over-all efficiency of the metropolitan area as an interrelated urban organism.

Considerable research has been done on the costs of construction and operation of different types of residence structures at different densities and under different assumptions as to costs of land, construction, and operation, and as to financing arrangements. Because these factors vary from city to city and time to time, however, each city must make its own studies or adaptations of studies made elsewhere. Considerable study has also been given to the problems of lowering the costs of urban transport, particularly public transit facilities, and to a lesser extent street systems. But such studies have, for the most part, not taken into account sufficiently the effects that shifts in urban patterns and densities might have in lowering transport costs. In the field of public services, we know in general terms that very low and very high densities are less efficient than those in middle ranges, but there are very few data, particularly on costs of maintenance and operation, as to the effects of various densities and designs on cost factors. We also know that size of city as well as density and design have an important effect on costs of transport and public services. In regard to the relative efficiency of different locational patterns of industry and commerce, there are only very fragmentary data.

In the case of each urban function, two types of studies are recommended.

One type would be rather generalized and theoretical. It would set up several possible patterns and densities for cities of different sizes and functions and then determine the relative cost factors for the vari-

ous functions under different sets of hypotheses. Although such studies might have only limited applicability to any particular city or metropolitan area, they would serve to establish general criteria, methods, and techniques that could then be applied to specific conditions in any particular city or metropolitan area. Furthermore, they would tend to show general limits within which various patterns and densities might be expected to affect costs. Thus, individual cities would have a guide to determine those fields where local research might yield fruitful results.

At the same time, studies in particular localities would be useful not only to indicate general development goals and the designs and densities for particular projects or urban redevelopment programs, but also to furnish the specific data that could be used in the more general and theoretical studies of urban patterns and densities.

When research in the efficiencies of separate urban functions has reached a reasonable degree of reliability, these separate studies may be put together so as to judge efficiencies of the whole working urban organism. Such over-all studies should also be carried on both at the general and theoretical level and at the level of specific localities, with the work at these two levels affording mutual support. At this stage, it would be possible to judge the possibility and relative importance of lowering costs in various functions through more efficient urban densities and patterns.

Finally, efficiencies that can be expressed in monetary terms must be balanced against the needs and desires for higher social standards and amenities that cannot be quantified in dollars and cents. At this higher level of judgment, extremely wise political and social insight are required. In the long run, over-all individual, family, and social well-being is the objective. Cost studies are important in indicating the levels of well-being that can be afforded, particularly if greater efficiencies can be achieved. Monetary cost alone, however, is not the only criterion of judgment, and in many cases should be subordinate to the larger social goals.

APPENDIX C

CHART AND NOTES ON BROADER CONSIDERATIONS IN THE EFFICIENCY OF URBAN PATTERNS AND DENSITIES

NOTES AND SOURCES FOR FIGURE 1 COST OF HOUSING AND PUBLIC IMPROVEMENTS AT VARIOUS DENSITIES

The purpose of this chart is to indicate a method for relating private housing costs to costs of providing public services in redevelopment projects of various densities. The same method could also be used in connection with new development areas. The figures used are not to be interpreted as indicative of "normal" or "average" conditions, since each redevelopment area in each city must be regarded as a special case. The purpose of the chart is to suggest a graphic method which can be used for quick preliminary analysis to determine the range of densities that will result in greatest efficiency from the point of view of the private developer and his tenants and from the point of view of the municipal government.

The top section of the chart indicates the over-all cost to the tenant for housing accommodations, converted to a monthly cost per person basis, assuming occupancy at the rather high ratio of one person per room. A slightly lower ratio of .8 or .9 persons per room would tend to be more normal for the type of units considered, which average four rooms for the detached and group houses and three and one-half rooms for the three-, six-, and twelve-story apartments. The assumed types of structures, size of dwelling units, densities, and monthly costs or rentals are taken from *Cost Measurements in Urban Redevelopment* by Miles L. Colean and Arthur P. Davis (National Committee on Housing, Inc., 1945). Monthly costs or rentals include cost of operation, maintenance, taxes, interest, and amortization. The combination of interest, amortization, and taxes is assumed at 6 per cent, which might be divided into 5 per cent for interest and amortization, and 1 per cent for real estate taxes. At higher rates, the shapes of the curves would not vary greatly.

Land cost is assumed at \$1.00 per square foot at the upper curve and \$0.25 per square foot for the lower curve. At the lower land cost, group houses at about 75 persons per net acre of site area have the lowest monthly costs. At the higher land cost, apartments of twelve stories height at about 500 persons per net acre would result in the lowest costs, although lower apartment buildings and even group houses are only slightly more costly. In interpreting these data, it should constantly be remembered that they apply only to certain types of construction and specific building and site plans. Quite different types of curves might result if different construction types and designs were used. It also should be mentioned that the curves are accurate only for the five plotted points representing the five building types considered. Actually, the lines between may vary considerably from the straight lines shown on the chart.

The lower section of the chart indicates the monthly charges for public improvements in a specific redevelopment area in New York City. These figures are based on F. Dodd McHugh's paper, "Cost of Public Services in Residential Areas" in *Transactions of the American Society of Civil Engineers*, CVII (1942), 1443. Monthly charges are computed on the basis of a 3 per cent annual charge ($\frac{1}{4}$ of 1 per cent monthly charge) for interest and amortization on the capital cost of all public improvements required to carry out a superblock redevelopment plan for a section in East Harlem, New York City. They can be taken as typical only of public improvements required in that particular section of New York in order to carry out a specific redevelopment plan. The public improvements for which cost estimates were made include streets, utilities, parks, schools, library, health, sanitation, fire and police buildings, and rapid transit.

Unfortunately, no data are available on the cost of operation and maintenance of these public services at different densities. However, operation and maintenance costs were computed for the highest density (540 persons per net acre) at about \$3.50 monthly, as compared with debt service charges of only \$0.30 monthly. Thus, the shape of a curve that included both operation and debt service charges might be considerably different from that shown on the chart. Furthermore, the shape of the curve might be quite different, particularly at the lower densities, if the street layout, park standards, or many other possible variables in the site plan had been changed.

Assuming purely for the sake of illustration of method that the shape of a curve representing combined construction and operating costs of public services would be roughly the same as that shown on the chart, the sets of curves on the chart could be very useful in making several types of decisions as to density for the specific redevelopment project

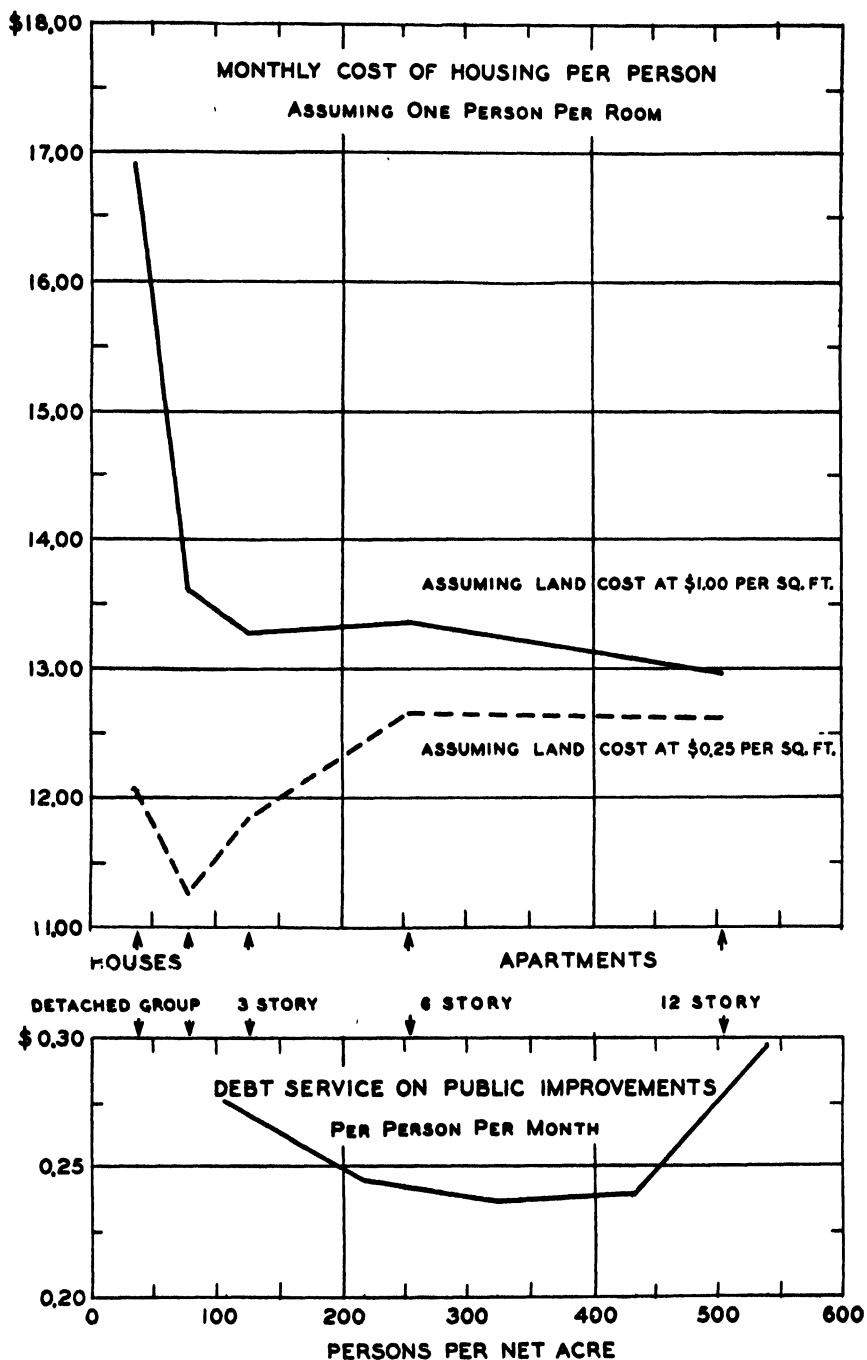


FIG. 1.—Costs of housing and public improvements at various densities

to which the figures applied. Lowest cost of public services could be achieved at densities between 200 and 450 persons per net acre. Within this density range, assuming land cost at \$1.00 per square foot, tall apartments at 450 persons per net acre would result in only slightly lower rentals than mixed projects of tall apartments, three-story apartments, and group houses at an average density of 200 persons per net acre. Since a project at the lower density would offer greater amenities and more desirable accommodations for different types of families, the slightly higher monthly costs might be well justified.

If the land were made available at \$0.25 per square foot, the group house density at 75 persons per net acre would result in considerably lower rentals than any other type of housing, but the public improvements would be somewhat more expensive. If the over-all metropolitan housing program and city plan indicated that the area under consideration was most suitable for families with small children, the higher public service costs at the lower densities might be justified on the grounds of superior living environment for the residents. It might even be decided that a large write-down in land values coupled with low-density restrictions would be in the general long-term public interest. The continuing lower rentals to the residents might offset, even from a purely monetary point of view, the greater public subsidy both in the form of land cost reductions and higher public service costs. For example, a reduction in density from 250 to 75 persons per net acre and a write-down in land values from \$1.00 to \$0.25 per square foot would, according to the figures used, result in a decrease in monthly housing cost per person from \$13.40 to \$11.30, or a saving of \$2.10. At the same time, the municipality as a whole might have increased its costs per person housed by about \$0.50. The question then arises: Is the municipality justified in spreading an increase of this size (which would come out at a small increase in tax rate) over all its taxpayers in order that the residents of the redevelopment project might enjoy considerably decreased rents and better living environment?

Many other types of comparisons and analyses with regard to densities and public and private costs can be made by this method of relative cost computations. Thus, decisions as to densities and land value write-offs can be made in the light of the amount and distribution of monetary benefits and losses. Such monetary considerations, however, should always be carefully weighed in the context of the wider social and economic purposes of urban redevelopment.

CHAPTER V

DENSITY DETERMINATIONS FOR INITIAL REDEVELOPMENT PROJECTS

PURPOSE OF THIS CHAPTER

PRECEDING chapters have indicated some of the major economic aspects of densities and patterns of urban development and redevelopment. These chapters constitute an exploration and an argument for an approach to the problem in both its narrower and broader aspects. This approach seems so basic to the functioning of an urban economy that no city of any size or complexity can afford to disregard it.

The older parts of most of our cities were built in the context of ideas on standards of urban living that were current in the nineteenth century and even earlier. They also were built according to the needs and possibilities of nineteenth-century technology in transport, municipal and structural engineering, industrial development, and business management. In the first half of the twentieth century, in central areas we have patched on to the nineteenth-century patterns many bulky multi-story structures, rapid mass transit, and some costly but essentially inadequate highway and parking facilities to accommodate the now ubiquitous private automobile and truck. At the urban fringes, we have built modern industrial plants and a welter of new houses—mostly in patterns that are now outmoded. Here and there are a few scattered examples that begin to approach the type of residential areas required by modern concepts and possibilities of urban living.

Now in mid-twentieth century, we are beginning to tackle the problem of replanning and rebuilding inner blighted areas and the dead subdivisions in the sprawling urban fringes. Nothing less than the most modern concepts of urban planning and building can hope to provide city areas that will not become obsolete physically, economically, and socially within a few decades. Billions of dollars of public and private funds will be poured into these areas. Merely to maintain their economic soundness, which in turn depends on their continuing physical and social acceptability, they must be planned with the aid of sound research and creative site planning. Among the kinds of research that are essential at the present moment are the types of economic studies of urban densities and patterns outlined in the preceding chapters.

A significant portion of these billions of redevelopment dollars probably will be spent according to plans that are formulated and accepted during the next four or five years. Although we desperately need the comprehensive studies outlined above, with few exceptions we will have to proceed, at first, without them. This is unfortunate, but it is a fact. Lacking these studies, each city must proceed as best it can, with the aid of such guides and such wise, but not fully substantiated, judgments as can be brought to the problem.

The purpose of this chapter is to present, not as an alternative to the comprehensive studies but as stop-gap formulations, some practical guides for determining densities and patterns for initial redevelopment projects. The suggestions and comments offered here are expedients to be revised and reformulated as results from the necessary basic research become available and as experience accumulates from the first undertakings.

APPLYING COST FACTORS TO DECISIONS ON DENSITY

The three preceding chapters have discussed three major aspects of the economics of density, namely residential building and operation costs (chap. ii), public service costs (chap. iii), and the over-all efficiency of various urban patterns and densities (chap. iv). Of these three aspects, the efficiency of various residential building types and densities seems to be of most immediate importance for planning initial redevelopment projects. So little attention has been given thus far to the other aspects that no conclusions as to their relative importances are possible.

COSTS AND RENTALS FOR VARIOUS RESIDENTIAL TYPES

As previously noted, there has been considerable study of comparative costs of various types of residential structures. This problem can be analyzed relatively easily in any locality where data are available on recent construction and operating costs of detached, semidetached, and row houses and multi-family structures of various heights. No redevelopment project should proceed very far in any city until at least general comparisons have been made of the rental levels that can be achieved in two-story, three-story, and multi-story apartments and their relations to rental or sales terms for detached, semidetached and group houses.

It may be emphasized at this point that building types and densities should not price the dwellings above the foreseeable market. For example, as indicated in chapter ii, disregarding land costs, reinforced concrete or steel frame multi-story elevator apartments generally rent for

appreciably more than three-story apartments of wood-frame construction. Also row houses or row flats, when designed to require no maintenance of halls or open spaces by the management, generally rent for less than three-story apartments. Therefore, redevelopment authorities and private investors in rental projects should construct no more of the higher-rental building types than a reasonable analysis of the future market indicates can be rented with a reasonable allowance for vacancies. The larger number of dwellings should be of the less expensive two- and three-story types.

All this may seem only too obvious. It is also fairly clear, however, that in times of general housing shortage and relatively easy mortgage financing these considerations are often ignored. Redevelopment agencies may properly be urged, therefore, to see that these facts are given full weight in all developments in their programs.

A substantial proportion of dwellings at as low rentals or sales prices as possible will aid any city in tackling its entire problem of blight. The present forms of slums and blight continue to exist in large measure because the cost of new housing is beyond the reach of too large a proportion of the population. Only by accelerating the rate of construction of housing for middle- and low-income families can the number of sub-standard dwellings in a locality be reduced rapidly. This does not mean that to reduce cost slightly either indoor or outdoor space should be less than that necessary to provide satisfactory living conditions. It does mean, however, that densities must be kept down to the point where most of the new building types may be of the lowest cost consistent with good standards of space, design, and construction.

In large cities, central area projects entirely of row houses or row flats may not be feasible. Other economic or social costs involved in long transportation hauls, costly street and utility extensions, and the like may make necessary density patterns for in-town projects that will include a considerable proportion of three-story or multi-story buildings. In general, however, even large cities should seek a preponderance of densities at the level required for row houses or row flats (approximately fifty to seventy-five persons per net acre).

Although decisions as to densities appropriate for various dwelling and family types will, of course, depend on many other factors in addition to lowest cost, whenever a more costly type of dwelling is selected, there should be very cogent reasons for the selection. This chapter will indicate what some of these reasons might be.

OTHER COST FACTORS IN URBAN DEVELOPMENT

In regard to problems discussed in chapters iii and iv, there are unfortunately no available basic studies to guide most cities in determin-

ing densities that reduce public service costs or in achieving over-all patterns of land use that minimize both public and private costs. A few studies applicable to parts of these problems have been mentioned.¹ Every city planning and redevelopment agency should make what use it can of such studies and apply its best judgment in estimating the probable effects of proposed projects on these broader aspects of public and private costs.

In general, the pressures toward excessive densities are much greater in large cities than in smaller urban areas. Much of the following discussion deals with the dangers of excessive densities and, therefore, will be most applicable to the larger cities. Much of it, however, will be equally pertinent to many smaller localities. At some points the discussion will refer to the dangers of too low densities and excessive urban sprawl.

DENSITIES AND BLIGHT

As pointed out at the beginning of chapter iii, no studies are available that measure, in quantitative terms, the degree to which excessive densities contribute to urban blight. There is no doubt, however, that in many blighted areas overcrowding of the land with buildings and people is a contributory blighting factor. In fact, blight as commonly defined is a complex of interacting physical, economic, and social forces and conditions. Land overcrowding is generally associated with a whole group of such blighting conditions, including inadequate light, poor ventilation, insufficient privacy, inadequate yard and play space, excessive noise and dirt, and a whole array of economic and social ills.

It should be noted, however, that some densities that are excessive and blighting for a gridiron street pattern and small lots may not necessarily have a blighting effect when the same area is redesigned on a superblock pattern with large sites developed according to modern practices of layout and generous open spaces. Because of the planning possibilities inherent in large projects and because of the normal pressures of the real estate market within which most site planners and architects are accustomed to operate, there will often be a tendency through clever design to crowd on a given site the maximum number of people that minimum, or even less than minimum, standards of building spacing and multi-story apartment construction will allow. Even when freed from normal real estate pressures by provisions for write-downs of land prices, designers of redevelopment sites must be on their guard against this ingrained habit of maximizing densities. As discussed more fully

1. See chapters iii and iv. A study that should shed some light on public service costs is being undertaken at the Department of City and Regional Planning, Graduate School of Design, Harvard University, under the direction of Professor William L. C. Wheaton.

later, project densities should be low enough to minimize the dangers of future blight resulting from land overcrowding. To determine such densities is no easy task, but no more important single duty now faces redevelopment officials and investors.

Elsewhere in this monograph and in other parts of URS, some of the ways in which excessive densities contribute to blight have been mentioned. In summary form, it may be stated that excessive densities and overcrowding help to produce such characteristics of slums and blight as:

1. Unhealthy living conditions, including lack of proper daylight, sunshine, air circulation, individual and family privacy; inadequate indoor and outdoor living space and community recreation facilities; excessive noise, dirt, and air pollution
2. Family and social maladjustments such as delinquency, crime, and marital and family unhappiness partly caused or aggravated by poor physical or mental health
3. Accident, noise, and dirt factors due to hazards of heavy traffic and commercial and industrial uses not properly insulated from living areas
4. High land prices that slow down or prevent any continuing process of redevelopment, without substantial public aid, in many districts
5. Disproportionate per capita costs of public services such as fire and police protection, juvenile and adult court and penal costs, public health, welfare, and recreation services
6. Threatened economic strangulation of central urban areas because of high costs of both public and private services caused by traffic congestion, high land values and rentals, and other factors
7. Actual or threatened movements of population, industry, and business to outlying areas without any proportionate lessening of servicing costs for inner areas

A significant point implied throughout the foregoing summary is a relationship between physical and social ills and higher monetary costs both for municipal governments and for families and private businesses. With our present knowledge about urban problems, the exact character and nature of this relationship cannot be demonstrated. Experience, observation, and a few partial but promising studies indicate quite clearly that the relationship is not one of mere chance.

REDEVELOPMENT LEGISLATION AND DENSITY STANDARDS

One of the major purposes of redevelopment legislation, both state and federal, is to provide local governments with the necessary powers and financial resources to cope with the problems of slums and blight

outlined above. These purposes are stated in the preambles of redevelopment laws, in transcripts of public hearings, and in documents written in support of redevelopment legislation. To carry out the intent of the law, therefore, public officials must insist on project densities that, in so far as possible, will help to eradicate these ills and to minimize the danger of their recurring in the future.

Specifically, redevelopment powers and finances are granted to close the gap between land acquisition costs and the fair use value of the land. Obviously the fair use value of residential land will be largely determined by the allowable density, which will in many cases be stated in special covenants running with the land. It is implicit in the legislation, therefore, that densities are not to be determined by present land costs in or closely adjoining the redevelopment area. Rather, urban patterns and densities are to be determined on the basis of other economic and social criteria. Chief among these is the prevention of future blight. Federal and many state laws explicitly require, therefore, that before engaging in redevelopment, cities must have a general plan indicating future land uses and densities, and that redevelopment projects shall be in accordance with this general plan for the locality. This plan should cover not only the whole of the municipality, but should be related to the development of the entire urban or metropolitan area of which the locality is a part. This latter requirement is based on common sense considerations. The forces that make for blight are no respectors of municipal boundaries. Neither are the trends in the economic and physical development of urban areas. Least of all are the competitive forces that redeveloped areas must face in attracting and holding occupants—tenants or owners.

OBSTACLES TO RATIONAL DETERMINATION OF DENSITIES

Past real estate operations in and near central locations have been geared to the practice of absorbing the costs both of the land and of the buildings to be demolished. The total of these costs becomes a new and higher land valuation which generally requires a more intensive use, either in the form of higher residential densities or nonresidential uses that can afford the more expensive land. The real estate development in these areas has been carried on for many years within this framework. Although developers with this background may be fully informed on the purposes and the powers inherent in redevelopment legislation, their approach and customary habits of thought often incline them to support densities for close-in redevelopment projects at least as high and often higher than the existing densities. As shown above, however, considerations both of preventing blight and lowering housing costs

may often indicate a considerably lower level of densities than is found in the older, more central parts of most of our larger cities.

"PRACTICAL" OBJECTIONS TO LOW DENSITIES

Whenever lowering of densities in close-in areas is proposed, many "practical" voices may be expected to be heard in opposition. The planners and others who make such proposals will be called "dreamers" or "visionaries" or "ivory tower idealists." On the other hand, it must be remembered that our areas of slums and blight with all their social and economic ills are the product of the practical men of the past. We are now preparing to spend billions of dollars to try to eradicate these ills. If we take the practical advice of today, to hold or even to increase in-town densities, what assurance do we have that we will be building anything but the slums and blighted areas of tomorrow? There is little reason to suppose that the practical men of today are much wiser in these matters than their counterparts of yesterday. Local officials charged with the responsibility of formulating and approving redevelopment project plans will do well not to be overawed by so-called practical advice.

Of course, this is not to say that planners and redevelopment officials necessarily have better judgment on such questions than others or that they should brush aside advice. Rather it suggests that when advice is offered or opinions are expressed, from whatever quarter, redevelopers would do well to look behind the specific recommendations to the facts, analysis, and arguments, if any, that support them. And if the facts and arguments are weak, neither private nor public redevelopers should be influenced by name calling and dogmatic assertions.

Basically, then, the drive to maintain or increase densities stems from old and ingrained habits of thinking about high-density types of urban building, and about the land value, investment, and tax-base structures built on these outworn city patterns. But since the general levels of density were established for most of the presently blighted areas, many families' conceptions of how they wish to live, and can live, given new modes of urban travel, have changed radically. For many of those who can afford new private housing today, nothing less than a detached house on a lot of fifty-foot frontage or more is acceptable. Many community builders, realizing this, now consider thirty- or forty-foot lots entirely inadequate for detached houses. Similarly, garden apartments with large, green open spaces are often preferred to the older city-type apartments with little yard space. Land costs and site assembly difficulties, however, have often precluded modern space standards in all but outlying sections. Thus the pressure for more space has been an important factor in sprawling metropolitan development and in very

fast rates of suburban growth while central cities have gained but slowly, if at all. As shown by preliminary 1950 Census returns, whereas many central cities since 1940 have grown only 5, 10, or 15 per cent, their suburbs frequently have 20 to 60 or sometimes even 100 per cent more population than in 1940.

Although such percentage increases require careful interpretation, it is still difficult to escape the conclusion that many families today want space, know they want it, and are going to get it. Again, although high-density projects replacing blighted areas may be without undue vacancies for some time, it may be fewer years than some think before their vacancy rates go up, and they can no longer pay off at the stipulated rate on their invested capital. The fact that until recently the Federal Housing Administration has insured loans for very few projects of more than three stories attests to a recognition of the dangers of high densities by the nation's biggest risk bearer in the urban real estate market. Local officials, builders, and investors who participate in redevelopment projects will do well to be as cognizant of the same dangers.

LOW DENSITIES AND LOW LAND VALUES

High densities for redevelopment projects may appeal to many local officials because they require less write-off of land costs, one-third of which must be met by local contributions in some form. Thus economy-minded local officials will tend to support more intensive use of redevelopment areas by minimizing parks, playgrounds, and other public open spaces, and maximizing multi-story apartments and commercial uses.

At the same time, owners of, or dealers in, other property close to or similar to that in the first redevelopment areas will wish to keep as high as possible the prices at which redevelopment sites are sold. Not only does a large-scale buyer of blighted property provide a new demand for such land, thus tending to keep up prices, but high densities established for redevelopment sites support the impression that other nearby sites are also suitable for high densities and, therefore, should continue to command relatively high prices. To a certain extent, therefore, the redevelopment density and pricing policy could be used as a tool to help maintain unduly high urban land prices and high-density environments for urban dwellers, even though most of them may prefer lower densities.

To a considerable degree and in the short run, most consumers of urban housing must accept the type of living environment that is offered. On the other hand, it appears that an increasing number of urban dwellers are demanding more space and are willing to travel considerable distances to and from their work to get it. At some point, there is obviously a limit to the amount of high density dwellings the consumers

will accept. If the first redevelopment projects absorb too large a share of this demand, much of the remaining slum and blighted land, whether developed by normal real estate operations or under redevelopment powers, must either be assigned lower densities or remain in its blighted state. It should not be too difficult to make this possibility clear to many property owners, business men, and others in the presently blighted areas. Also, too many multi-story apartments in the first redevelopment projects will set a public conception of redevelopment that must later be changed if the whole program of blight elimination is not to be slowed down or defeated altogether.

Then, too, from another but related point of view, a redevelopment agency would do well to pursue a land purchase and a site-pricing policy that will minimize the cost of future acquisition of blighted areas. The sooner the local community comes to accept the idea of low densities for close-in sections, the sooner the general price level of blighted areas will tend downward. Not only will the redevelopment agency then be able to proceed more rapidly and more economically, but also, in some sections, ordinary real estate operations may be stimulated, particularly on sites close to redevelopment projects where the character of redevelopment building enhances the desirability of adjoining property.

In a very real sense, then, the densities established for initial projects may make or break the long-term program. Redevelopment officials, realizing the importance of this crucial issue, will do well to maintain their allegiance to the major public purpose of eliminating slums and blight rather than yielding unduly to pressures to reduce initial local contributions or to accommodate the short-term private interests of a few owners in slum and blighted areas.

TAX BASE

An important by-product of the density and site-pricing policy in redevelopment projects is their effect on the municipal tax base. Municipal officials and the taxpayers in general are properly concerned with maintaining a high level of assessed valuations and as low a tax rate as is consistent with adequate public services. Obviously, the lower the density and the site price, the lower the assessed value of the redeveloped properties. Nevertheless, even though a quite low density and price be established, the redeveloped site will yield, in nearly all cases, a considerably higher tax return than before redevelopment. Moreover, the generally high cost of furnishing many municipal services in blighted areas will be reduced somewhat in the long run. Quite probably, however, many persons concerned with local finance will press for higher densities and land prices, without proper consideration of the

difficulties that such high density initial projects may bring in carrying out future redevelopment.

In the longer view, a sounder objective would be to realize a series of somewhat smaller tax base increments by a succession of redevelopment projects over the years. If the project densities are too high to stem the movement to the suburbs, if they result in an early recurrence of blight in the redeveloped area, or if they hamper the progress of step-by-step blight elimination as indicated above, obtaining a large tax base increase by the initial projects is, in effect, killing the legendary goose that lays the golden eggs.

Of course, in the context of the whole problem of municipal tax base, the contribution of the initial redevelopment projects will be very small, and only one of many relevant factors. Redevelopment officials should be able to meet squarely the tax base arguments that attack proposed densities and site prices as too low. Their effects on municipal finance, both short term and long term, should be analyzed in the wider context of municipal finance suggested above, as well as against the broader social objectives of redevelopment and of municipal government in general.

REHOUSING

Under almost any circumstances, rehousing the occupants of redevelopment sites is a difficult problem. It is particularly difficult where housing shortages are acute and may become even more acute because of war conditions. For both legal and policy reasons, site clearance can take place only to the extent that adequate alternative quarters are available for displaced families.

Some people may argue that such shortages require that redevelopment projects should house more families than now occupy the site. Where existing densities are already high and housing units are overcrowded, as they are in many slum and blighted areas, this policy would require even higher densities in the new project, often a large proportion of multi-story buildings. As previously indicated, such high densities are frequently undesirable from the point of view of the larger social and economic objectives of urban development.

This approach to the problem reflects a mistaken view of the relation of rehousing to redevelopment. In the first place, rehousing is a short-term operation that will be completed within months or at most a year or two for each project, while the projects themselves will become permanent parts of the city's living environment. To sacrifice the long-term welfare of the city and those who will live in redevelopment areas merely for the sake of expediency in rehousing is not sound public policy.

It is clear also that under the present conditions the rehousing problem should be minimized by displacing the smallest number of families without prejudicing other aspects of the program. Even so, only a portion—often a very small portion—of the displaced families are likely to move into the new housing either because they cannot afford the rents of new private dwellings or because they are ineligible for, or do not wish to live in, the public housing that may be provided. Once the displaced families have found quarters outside of a slum clearance site, experience shows that only a handful are likely to move a second time, back into the new buildings. All that would be accomplished by higher densities in the redevelopment site would be to crowd new residents into a section of the city that, from the over-all point of view of city development, is often already overcrowded.

A much sounder approach to the rehousing problem is to provide for those densities on clearance sites that are appropriate in light of over-all city development, and at the same time to stimulate a high rate of new building on vacant land requiring no displacement of population. The redevelopment agency can help to increase the supply of such sites by early development of projects in dead subdivisions or other appropriate vacant areas. Although relatively few of the families displaced from built-up blighted areas may be able to afford new private housing in such sites, the additions to the housing supply will tend to loosen up the top sector of the housing market. Depending on a variety of circumstances, this effect will be felt to a certain extent in successively lower rental and sales brackets,² and may aid to a greater or lesser degree in providing accommodations for some of the families displaced by site clearance projects. Public housing on similar vacant (or almost vacant) sites may help more directly in taking care of other displaced families in the lower-income brackets.

Quite aside from any discussion of the extent to which this filtering down process may occur, the fact remains that the provision of a substantial supply of new housing at lowest possible costs will have much the same effects on the rehousing problem whether that housing is built entirely in cleared areas at high densities or, at lower densities, partly in cleared areas and partly in vacant sites reasonably accessible to places of employment. In fact, since tall apartments are generally more expensive to build and operate than lower residential structures, building at lower densities and lower costs would have a greater effect in loosening up the housing market in the middle and lower middle brackets, and thus would facilitate the rehousing of displaced families.

2. For a well-considered discussion of this filtering-down process, and the conditions and possible extent of its operation, see Richard U. Ratcliff, *Urban Land Economics* (New York: McGraw-Hill Book Co., 1949), pp. 321–34.

OVERCOMING PRESSURES TOWARD EXCESSIVE DENSITIES

Even before definite densities for initial projects are proposed, redevelopment officials may do well to enter into discussions of density with interested community leaders and with members of public bodies that must approve redevelopment project plans. As a matter of tactics, however, these discussions should be carefully timed so as not to interfere with or unduly complicate the development of public understanding of the program and the necessary early actions of the local legislative body in regard to redevelopment.

When the time is ripe, such discussions might start with the setting of tentative density ceilings for any large-scale site development. In some cities, adopted land-use plans, zoning ordinances, or existing densities in blighted areas may form convenient bench marks for establishing such ceilings. In other cities, where zoning and land-use plans are outmoded, alternative devices for establishing density ceilings may be more appropriate. Part of the case for these density ceilings will consist of the type of argument outlined under the preceding subheads of this section. If possible, however, the greater emphasis should be on the positive criteria for establishing rational densities, which are discussed in the following section.

When sufficient local opinion in favor of reasonable density ceilings has been established, and when project plans have progressed to the point of formulating firm densities for each site, modifications of the general ceilings for specific sites may be advanced and defended. The following section outlines briefly the scope of the studies and some of the techniques that are recommended for establishing specific project densities.

In any event, the obstacles to establishing rational densities must be handled with good public relations sense, with a careful consideration of the local situation, with some flexibility in compromising on details, but with a firm resolve to hold to basic rational density ceilings.

CRITERIA AND TECHNIQUES FOR ESTABLISHING PROJECT DENSITIES

As pointed out, the United States Housing Act of 1949 (Title I, Section 105a) and the provisions of many state redevelopment laws require that redevelopment plans shall conform to a general plan for the development of the locality as a whole. A basic part of such a general plan is over-all population densities for the different parts of the locality. The next subsection of this chapter, therefore, deals with the studies and plans for the whole urban area that can help in determining

densities and land patterns of proposed projects properly related to the urban area as a whole.

Following this, under the second subheading below, is a consideration of project densities which, without reference to the city plan, may be said to be not inherently blighting. A redevelopment project over its whole life must be able to compete with other existing and future residential areas in the locality in holding its residents. This criterion is, of course, of paramount concern to private investors who wish to be assured that they can pay off their mortgages and realize a reasonable return on their equity capital. The interest of the community is somewhat similar in requiring a density that will not result in loss of occupants, undue obsolescence and deterioration not merely over the life of the mortgage, but over the whole time that the structures may stand, perhaps as much as fifty to one hundred years or even longer.

GENERAL LAND-USE PLANS AS A GUIDE TO PROJECT DENSITIES

Many methods and techniques for making urban land-use and density plans have been used in different cities at different times. Although the first zoning ordinances in most of our cities have been largely based on existing land uses and speculative hopes for the future, some cities have drastically revised their zoning in the last decade and have attempted to bring the total allowable population capacity more nearly in line with reasonable estimates of future population and number of families. Unfortunately, in too many instances, existing conditions and land values have set the patterns, rather than a long-range objective of desirable city development. Given the usual public understanding of the significance of density problems, the assumptions and conditions underlying most real estate operations, and the degree of public control that is locally acceptable, a more or less unsatisfactory outcome is almost a foregone conclusion in these localities.

In other cities that have used more advanced but unfortunately still inadequate methods for making land-use and density plans, the procedures outlined below, or some variant of them, have been developed.

1. Estimates are made of the reasonable future trends in population, family size, and number of families. Such estimates involve projections of past population data for the metropolitan area and for the proportion likely to be within the city boundaries. These projections are linked with and often modified by a study of the economic base of the community, and the extent to which future industrial, commercial, and other income-creating activities may be expected to furnish the employment opportunities necessary to support the projected population.

2. After these population estimates have been made, an analysis of land use—existing and needed in the future—shows how much and in what locations land should be reserved for industrial, commercial, residential, institutional, and public purposes.
3. Against the background of this broad and necessarily rough estimate of future land uses, the residential areas are commonly classified as follows:
 - a) Slum and blighted areas appropriate for redevelopment
 - b) Nonblighted, built-up residential areas ranging from new subdivisions to older sections that still have a considerable number of years of useful life
 - c) Vacant and predominantly vacant areas, generally but not entirely in outlying locations, where new residential building may be expected

In general, the nonblighted, built-up areas will retain their present character for some years. New building will be concentrated largely in the vacant and redevelopment areas.

4. The probable future population of the nonblighted built-up areas can be determined within reasonable limits on the basis of the number of family quarters now available, an allowance for conversions, new building on parcels now vacant or which may become vacant through demolition, and a vacancy factor in the dwelling supply.
5. Similarly, the population capacity of vacant and predominantly vacant areas zoned for or appropriate for detached homes is easily computed when a reasonable minimum standard lot size is firmly established by local ordinance or by existing subdivision practices.
6. A more difficult problem arises in connection with establishing the population capacity for vacant and redevelopment areas that might properly be developed for housing types other than the detached house. In approaching this problem, the experienced planner considers for each separate area such factors as:
 - a) Topography, drainage, subsoil, vegetation, climate, air pollution, and the like
 - b) Cost of land development and foundations
 - c) Relation to work centers, transit and highway facilities, existing or planned
 - d) Needs of various family types for houses or apartments
 - e) Needs and desires of minority groups and special occupational groups with irregular hours, specialized work locations, or distinctive commercial or institutional requirements

- f) Desirability of homogeneous or heterogeneous neighborhoods with regard to structural types, family types, income and social characteristics
- g) Relative needs of houses for sale as compared with rental properties, including public as well as private projects.

All of the foregoing factors have long-range but varying significance in the structure and growth of each community. A full discussion of them is beyond the scope of this monograph. They are listed above only to indicate the many aspects of the problem that should be considered.

7. Holding these various considerations in proper proportion, the experienced and skillful planner, usually by trial-and-error methods, fits the expected future population into the available land area. The result of such studies is to establish a pattern for the general guidance of city development, including density ceilings for various parts of the city.

An example of this type of planning for population redistribution within a city is contained in a report of the Chicago Plan Commission, *Master Plan of Residential Land Use of Chicago*. The following table presents summary figures adapted from this report.

TABLE 5

ESTIMATED FUTURE POPULATION CHANGES IN THE TYPES OF PLANNING AREAS IN CHICAGO*

TYPES OF PLANNING AREAS	AREA (Square Miles)†	POPULATION IN 1939‡		FUTURE POPULATION		POPULATION CHANGE (Number)
		Number	Density per Square Mile	Number	Density per Square Mile	
Blighted	9.30	374,861	40,307	326,800	35,140	-48,061
Near-blighted . . .	13.32	464,584	34,879	431,200	32,372	-33,384
Conservation . . .	56.27	1,655,537	29,421	1,526,000	27,119	-129,537
Stable	36.17	650,650	17,989	790,100	21,844	139,450
Fringe	20.07	116,353	5,797	266,070	13,257	149,717
Vacant	19.82	6,369	321	273,840	13,816	267,471
Total	154.95	3,268,354	21,093	3,614,010	23,324	345,656

* Adapted from Chicago Plan Commission, *Master Plan of Residential Land Use of Chicago* (1943), Table 29, p. 122.

† These figures exclude areas primarily nonresidential, i.e., commercial, industrial, recreational, cemetery, and institutional areas. They include streets and alleys within residential areas.

‡ Source: The Chicago Land Use Survey, 1939.

Another study that approaches the problem on a metropolitan basis rather than for the central city alone is the Cincinnati Metropolitan Master Plan Study. The volume of this series on *Residential Areas* anticipates that 120,000 new dwelling units will be built in the urban sections of Hamilton County and allocates them as summarized below.

In both the Chicago and the Cincinnati studies, the full text must be thoroughly studied to understand the basis for population density and distribution estimates. Citing them here does not imply that they are necessarily the most satisfactory estimates that could be made.

Rather, they are referred to as examples of this general type of approach in complex situations in actual urban areas.

TABLE 6

NUMBER OF DWELLING UNITS TO BE BUILT ON SPECIFIED TYPES OF LAND IN THE HAMILTON COUNTY URBAN AREA, FROM 1946 TO 1970, BY LOCATION*

Community and Neighborhood	Total Units Allocated	To Vacant Lots, Clearance Areas, and Small Parcels of Acreage	To Vacant Acreage
Total, Hamilton County area	120,000	54,000	66,000
City of Cincinnati	61,000	45,000	16,000
Remainder of Hamilton County	59,000	9,000	50,000

* City Planning Commission, Cincinnati, Ohio, *Metropolitan Master Plan Study, Residential Areas* (1946), p. 73.

Admittedly no such density plan can be considered as the final word.

In the first place, previous estimates of future population have often proved to be considerably in error, particularly when they have been made for individual urban areas or for cities that form only parts of metropolitan districts. Although we are somewhat more sophisticated and experienced in making such estimates today than we were two or three decades ago, estimating future population for urban areas is still subject to wide margins of error.

To a considerable extent, the possible margin of error may be taken into account by the familiar technique of making high, low, and medium or most probable estimates. Although plans are usually made for the most probable estimate, they should have some degree of flexibility so that they can be subsequently adjusted should the actual population come closer to the high or the low estimate.

Fortunately, in preparing density plans a considerable degree of flexibility is achieved quite easily in most urban areas. As previously pointed out, new building development at any one time will be concentrated largely in vacant outlying areas and in redevelopment sites. Allowable densities in these sections can be based on the most probable population estimate for the whole locality. At a later date, if future developments indicate a trend toward the high or low estimates, the density plan can be revised as it applies to the areas then about to be built. Densities in these areas may be revised upward in case of more rapid population growth, or downward if fewer families are expected in the whole locality or in any particular part of the metropolitan area.

In the second place, estimates as to the future use of outlying vacant lands available and suitable for residence may prove to be considerably in error. The outward spread of urban development, particularly in metropolitan areas, has been very rapid in recent years, and may be even more rapid in the future. This phenomenon has sometimes been described as "urban sprawl." Many possible areas for residential build-

ing remain dormant while developers concentrate their activities in some unlikely as well as in some eminently appropriate sections. Industrial and commercial as well as residential shifts are involved in this process. Thus the vacant areas that may be considered as possible future residential sections must be very broadly defined.

If the trend toward decentralization should be stronger than expected, densities in the more central sections should be correspondingly reduced. If, later, redevelopment activities or other factors indicate a greater degree of population concentration and desire for in-town urban living, densities in central city locations may be revised moderately upward.

In general, this process of adjustment is an illustration of the principle that the usefulness of future estimates is in making decisions affecting plans and programs for prompt execution. These plans must be made in the light of their relationship to long-term trends as best they can be foreseen by competent estimators using the best techniques available. As time passes and new decisions as to immediate programs must be made, these long-term estimates must be reviewed and revised as indicated by new conditions. There is no assumption of infallibility. Rather, the assumption is that decisions that will vitally affect the urban environment for many years to come should be made with the aid of the best estimates possible.

It should be pointed out also that, to a greater or lesser extent, population shifts within an urban area are not entirely haphazard. They result from a complex of conditions and forces that are subject to various forms of guidance and control, including zoning, subdivision regulation, public housing, redevelopment activities, and provision of public facilities such as highway and transit improvements, schools, parks, and utilities. Other possibilities for influencing trends may be found in tax policies and adjustments, policies of the Federal Housing Administration and various other means. Thus, to the extent that such public activities may be used to influence development in the direction of a carefully made general plan, there may be less need to revise future estimates and density plans based on them.

PROJECT DENSITIES AND LONG-TERM VALUES

The preceding subsection has outlined criteria and methods for developing and revising land-use and density plans. With minor modifications, these methods are applicable to a metropolitan area, a city in a metropolitan area, or a nonmetropolitan, urban locality. The discussion has been confined to the problem of accommodating expected populations in the areas suitable for and likely to be used for residential purposes. In addition, the densities called for in the plans should be in

accord with the requirements of housing with adequate light, air, and open space for healthful living. The density plan for the whole locality indicates the general level of densities considered appropriate for each section of the city, including those proposed for redevelopment project sites, whether in built-up blighted areas or on vacant or predominantly vacant land.

For purposes of project planning, however, considerably more detailed consideration of suitable densities is necessary. Whereas the general density plan is primarily the responsibility of the city planning body, the more detailed establishment of project densities is more directly the concern of the redevelopment agency and the redevelopers, whether private investors and builders or public housing authorities. When a relatively large site is acquired by a single organization, considerable latitude in building arrangement and design is desirable within the allowable gross densities. The city planning and redevelopment bodies, however, may consider it necessary to exercise some control over the type and size of dwellings, because, for example, the type of structure and number of bedrooms per dwelling unit influence to a considerable extent the number of growing children for whom adequate school and play facilities must be provided. When small sites are divided among a number of different builders, more detailed control of site planning and building design may be necessary to assure desirable densities and building relationships throughout the whole redevelopment area.

The major criteria for establishing site planning densities and density controls are of a complex social and economic nature. On one hand, public health and welfare call for standards of space and arrangement within and outside of dwellings to provide adequately for the various needs of the families to be housed. On the other hand, these standards must not be so high as to increase housing costs unduly or to prevent cost reductions that may be achieved in such ways that family and individual physical and psychological health are not impaired. The strategic approach is to find those ways in which adequate standards for healthful living can be achieved without adversely affecting costs. In redevelopment projects, one of these strategic points would appear to be reasonably low densities, since land cost to the developer can be reduced to a fair value for the density allowed. Obviously, it is to the advantage of the developer to provide as healthful and attractive a living environment as possible provided it does not significantly increase the rentals to be charged. Moreover, good living environments are highly desirable from the point of view of the community as a safeguard against blight in future years.

Only a very brief discussion of the criteria and methods for estab-

lishing individual project densities is within the scope of this monograph.³ Of foremost importance are determinations of the types of families to be housed and of the kinds of dwelling structures most appropriate for each type. In part, these will depend on the site location in relation to places of employment, shopping and cultural facilities, and opportunities for recreation both passive and active. For example, locations close to the central business district are especially convenient for households where two or more members work in the downtown section, particularly in hotels, restaurants, places of amusement, or other service activities that require late evening working hours. These locations are also desirable for single person and retired couples or individuals who enjoy the cultural amusement facilities located in or near central districts.

At the same time, consideration must be given to the trends in family type and composition including smaller families, families without children, and many more older people in the population. The extent to which residential buildings fitted to these changing family needs are now being built should be analyzed so that dwelling types in redevelopment projects can supplement the housing supply so as best to fit future as well as present family needs.

Among certain groups, much support is growing for so-called mixed neighborhoods to encourage greater stability of population and concomitant community stability. Such neighborhoods would provide balanced proportions of dwelling types suitable for many different types of households. There would be small units for individuals, and for younger and older couples that have not yet reached or that have passed beyond the child-rearing stage, as well as dwellings best suited for families with growing children. Thus, if persons wished to do so, they could more easily remain in the same neighborhood throughout the various stages of family life. This type of neighborhood would presumably require mixed dwelling types, including detached, semi-detached, or group houses with direct access to the ground and with private yards which are particularly desirable for families with growing children, as well as walk-up or elevator multi-family structures with both smaller and larger sizes of dwelling units to meet the needs of various family types who prefer the conveniences of apartment living. Care should be taken, however, not to place too many apartments and small-sized dwelling units in outlying locations with poor access to work places and cultural and amusement facilities. In some cases, outlying apartments of this kind have been difficult to rent.

3. For a fuller discussion of neighborhood densities for healthful living together with many references to other works on site and neighborhood planning, see American Public Health Association, Committee on the Hygiene of Housing, *Planning the Neighborhood* (Chicago: Public Administration Service, 1948).

There is also growing support for neighborhoods providing for various income levels, including some public housing as well as medium- and higher-priced private dwellings. Again, the proportions of each type will depend on many local market and other factors. Public housing raises special density problems because dwellings are of minimum size with occupancy averaging about one person per room as compared with two-thirds to three-fourths persons per room in much new private housing. Moreover, public housing tenant selection policy results in a relatively high proportion of growing children. Although the preferences of such families are strongly in favor of group or detached houses,⁴ cost considerations unfortunately have often resulted in multi-family structures.

Once the proportion of dwellings to be provided in various types of structures has been determined, the next problem is to set densities for each type that will make possible reasonable standards of daylight, sunlight, air circulation, privacy, quiet, automobile parking, and usable outdoor space. Such standards for the various dwelling types have been the subject of considerable study. The report of the Committee on the Hygiene of Housing, *Planning the Neighborhood*, gives general guidance, but each project site requires individual study. Various conditions of topography, climate, relationship to trafficways, parks, water areas, and commercial or industrial districts raise problems that require special consideration. For example, if multi-story elevator apartments are proposed, the problems of automobile storage become acute, since the ground area required to store a single car is almost one-fourth the size of an average dwelling unit. Assuming that storage space for one car should be provided for each dwelling unit, a four-story apartment building would require as much ground coverage for autos as for the residential building, and a twelve-story building three times the ground space for auto storage as for building coverage. Site planners will deal with various alternatives such as two- or three-story garages, basement garages, open air parking, as well as driveways and street space for proper access. Moreover, automobile space should not be allowed to affect unduly the provision of other usable outdoor space. The cost factors involved in these alternative arrangements must be carefully analyzed. Such problems indicate the need for thorough study of proposed site plans particularly for projects with multi-story structures.

Densities must be considered not only on the basis of land used for dwelling sites, but also with relation to general neighborhood areas including parks, schools, local shopping, and other community facilities. If project boundaries conform to so-called neighborhood boundaries formed by major traffic arteries or other barriers, and include a whole

4. See chap. i, p. 116 and footnote 10.

elementary school district, the provision of these neighborhood facilities can be planned as an integral part of the project site plan, with adequate nonresidential areas provided to serve the expected population in the project. Often, however, project boundaries may not fit so neatly into the neighborhood unit scheme of planning. In fact, there is much controversy over the realism and the social desirability of the neighborhood unit concept.⁵ The case against the neighborhood unit idea is particularly cogent when such neighborhoods consist of housing for families of only one type and income level.

In a single neighborhood, it may be possible to combine new structures with relatively sound existing structures—some in their present state, some to be rehabilitated. Such a plan, of course, depends on the existence of suitable existing structures in or adjacent to the blighted areas appropriate for redevelopment. It will tend to provide for a mixture of family types and incomes as well as often for a less sterile appearance of the neighborhood.

In discussing the broader questions of densities earlier in this chapter, it was pointed out that redevelopment housing must compete with housing in other parts of the city or metropolitan area—not only with existing housing in these areas but with housing that will be built in them later on. This same fact is also pertinent to detailed density standards and site layout. Weak compromises and corner-cutting on reasonable requirements may make a lot of trouble for the future.

Finally, relative construction costs and rentals for various types of structures of comparable design and environmental amenities must be compared. As pointed out earlier in this chapter, this type of data points strongly toward building types at lower densities in order to achieve lower rentals. Care must be exercised not to stimulate an oversupply of the multi-story higher density and higher rental type of accommodations.

GOOD JUDGMENT IN DENSITY DETERMINATIONS

There is no substitute for good judgment in determining densities for redevelopment projects. Our present shortage of facts and research results in many phases of the subject aggravates the difficulties of those responsible for decisions. The different aspects of the problem must be weighed, as carefully as possible, to assess their relative importance. The architect, site planner, engineer, real estate developer, economist, sociologist, and financier all have significant parts to play. In synthe-

5. See Reginald R. Isaacs, "Are Urban Neighborhoods Possible" and "The 'Neighborhood Unit' Is an Instrument for Segregation," *Journal of Housing* (July and August, 1948), and comments and replies in subsequent issues. A restatement of the neighborhood concept, within a broader setting, is in James Dahir, *Communities for Better Living* (New York: Harper and Bros., 1950), particularly pp. 210-59.

sizing their contributions and relating all technical aspects, the experienced urban planner has a most difficult as well as a most important part to play.

In the last analysis, many decisions will be made by the local legislative body, operating within the framework of pressures from many diverse business, professional, and civic groups. Densities, as well as other aspects of the redevelopment plan, may be decided by a series of compromises, as are most public issues in a democratic society. Because of the complex interrelationships of many technical factors, however, changes in any one element of the plan, such as densities, should be made only in consultation with technical personnel. Otherwise what may seem to be relatively minor modifications in one element may actually produce many unforeseen consequences in other phases of the development.

PART III

PRIVATE COVENANTS IN URBAN REDEVELOPMENT

BY
CHARLES S. ASCHER

EDITOR'S FOREWORD

AMONG the primary objectives of urban redevelopment agencies are two that are closely related: (1) to assure that land acquired by them and made available for new building is, in fact, developed in accordance both with over-all city or metropolitan plans and with the more detailed site plans for project areas, and (2) to make sure, as far as possible, that the redeveloped areas will not become blighted again in the near future.

Fortunately local public agencies have a fairly considerable battery of measures and powers that may be used for these objectives—various police power measures including zoning, building, housing, and sanitary codes, subdivision control ordinances; provisions in leases; and private covenants in deeds. Unfortunately, many of these devices are poorly understood, their provisions usually lag behind the needs to which they are applied, and their administration or enforcement often leaves much to be desired. All of them, however, are potentially useful servants of local redevelopment programs.

In my opinion, Mr. Ascher's contribution, "Private Covenants in Urban Redevelopment," has three characteristics that distinguish it from other items in the written discussion of deed restrictions. It has been written with particular attention to the programs and problems of local officials responsible for redevelopment programs. Its treatment of the legal bases and aspects of covenants breaks an almost new path between the overly simplified generalizations in nonlegal monographs and textbooks, on the one hand, and the highly technical analyses in some of the treatises on real property law and in some of the leading court opinions, on the other. Finally, Mr. Ascher has given attention to the administration of an elaborate set of covenants in effect in Radburn, New Jersey, over a period of some twenty years. We would have liked to cover the corresponding experience of other developments. Neither the funds nor other facilities were at hand, however, for this additional job, and we chose a reasonably thorough study of one development rather than a superficial coverage of several.

In the first part of his monograph Mr. Ascher has dealt with the legal foundations of private covenants in deeds and with their place in

urban redevelopment programs. Here and elsewhere he has offered advice, given warnings, both to administrative and legal officials on the content, drafting, and administration of covenants. Here I would emphasize only two points: Private covenants are most appropriate in establishing fairly elaborate sets of regulations and guides for projects or developments of substantial size. Seldom, if ever, are they the best device for setting up a few simple requirements for small undertakings with few or no facilities for effective enforcement. As he has put it—don't use an elephant gun to shoot a squirrel. And wherever private covenants may be used, care should be taken that they are not made so detailed and rigid that they will militate against the skills of architects and site planners.

The statement in the Preface on keeping up-to-date the descriptive parts of those URS monographs that were completed first, applies particularly to Mr. Ascher's contribution. His work for the study was finished by the end of 1950. Although he has made some additions since then, e.g., the reference to the 1952 case of the Supreme Court of New Jersey mentioned in footnote 23 of chapter i—these cover only items that he has come upon by chance or in other work during recent months.

Mr. Ascher's qualifications for this part of the Urban Redevelopment Study are many and varied. He is a member of the bar in both New York and Illinois. For five years he was general counsel of the City Housing Corporation, which planned and developed Radburn. In this capacity he was the chief draftsman of the Radburn covenants, which he has discussed at some length here. He has been executive director of the National Association of Housing Officials, an officer for many years of the American Society of Planning Officials, a staff member of the National Resources Planning Board, for five years the New York regional representative and, for part of that time, director of the Urban Studies Division, Office of the Administrator, National Housing Agency. He is now chairman of the Department of Political Science at Brooklyn College.

INTRODUCTION

THIS report proposes in chapter i to sketch the role of private covenants in urban redevelopment. In chapter ii, some cautions will be expressed about their use, in the light of the complex and obscure legal history of the doctrines upon which they are based, without attempting in any way to provide a lawyer's handbook. Chapter iii will review briefly an experience of twenty years in one community, Radburn, New Jersey, where a scheme of covenants has served as the basis for an "extra-municipal government by contract." It is hoped that chapter iii may overcome any discouragement created by chapter ii.

CHAPTER I

THE ROLE OF COVENANTS IN REDEVELOPMENT

RECOGNITION IN THE HOUSING ACT OF 1949

THE Declaration of National Housing Policy, constituting Section 2 of the Housing Act of 1949,¹ directs the agencies of the federal government to "encourage and assist . . . (4) the development of well-planned, integrated, residential neighborhoods and the development and redevelopment of communities." The purposes of federal aid for slum clearance and community development and redevelopment under Title I of the Act include "preventing the spread or recurrence . . . of slums and blighted areas" (Sec. 101 [a] [2]).

The Division of Slum Clearance and Urban Redevelopment of the Office of the Administrator of the Housing and Home Finance Agency has issued a Guide² which suggests at a number of points ways in which private covenants may be involved. Thus, the Administrator will require that ". . . the redevelopment plan for a project must indicate the proposed land uses and building requirements in the project area, including population density, building coverage and land use standards" (p. 21). The Guide refers to the statutory requirement

. . . that the purchasers or lessees of land in a project area for redevelopment be obligated to devote such land to the uses specified in the redevelopment plan, . . . and to comply with such other conditions (set forth in the contract for financial assistance) as the Administrator finds necessary to carry out the purposes of the Act³ (p. 22).

In discussing the acquisition of land, the Guide suggests that "condemnation may be necessary also . . . to remove restrictive covenants" (p. 23), a problem discussed in chapter ii of this report at page 269.

The Guide states a specific requirement that the Administrator is to impose in every contract for financial assistance under Title I whereby the local public agency must cause to be removed or abrogated any existing covenant against sale, lease, or occupancy of the land based

1. P. L. 171, 81st Cong., 1st sess.

2. *A Guide to Slum Clearance and Urban Redevelopment under Title I of the Housing Act of 1949*, revised July, 1950. 30 pp. (processed).

3. Housing Act of 1949, Title I, Sec. 105 (b), Sec. 106 (c) (7) authorizes the Administrator to include "covenants, conditions or provisions" in "any contract or instrument made pursuant to this title."

upon race, creed, or color; and must adopt effective measures to assure that no such covenant may be imposed upon the land in redevelopment (pp. 24-25). The Guide adds, significantly:

This requirement does not apply to any other covenants or restrictions within the purview of the redevelopment plan pertaining to the types of improvements which may be built in the project area or the uses to which such real estate may be put. *Such covenants and restrictions, in fact, may generally be desirable in order to protect the project area from future encroachment of slums and blight* [p. 25. Our italics].

RECENT CONCERN WITH RACIAL COVENANTS

As recently as 1944, as formidable an authority as the American Law Institute, in its *Restatement of the Law of Property* (to which we shall refer in other parts of this report), said that "in states where the social conditions render desirable exclusion of the racial or social groups from the area in question, the restraint is reasonable and hence valid. . . ."⁴

In 1940, a note in a leading law review stated: "the constitutionality of this private means of segregation is firmly established."⁵ The decision of the United States Supreme Court in *Shelley v. Kraemer* and associated cases⁶ is generally supposed to have dealt a death blow to racial restrictions, coming after some years of social and legal agitation.⁷ The ingenious reasoning of this opinion should be studied carefully, however, because the decision is not all-embracing. The court admits that the covenant may be a valid promise between the parties but denies the processes of the state to enforce it. There are indications that a rear-guard action will be maintained rather than to surrender this tool.⁸

4. *Restatement of the Law of Property, as Adopted and Promulgated by the American Law Institute* (St. Paul: American Law Institute Publishers, 1944), Vol. IV, Sec. 406, illustration 21, p. 2411.

5. "Negro Restrictions and the 'Changed Conditions' Doctrine," 7 *Univ. of Chicago Law Review*, 710 (1940).

6. (1948) 334 U.S. 1.

7. See D. O. McGovney, "Racial Residential Segregation by State Court Enforcement of Restrictive . . . Covenants . . . is Unconstitutional," 33 *California Law Review*, 7 (1945).

8. See *Weiss v. Leona* (1949) 359 Mo. 1054, 225 S.W. (2d) 127 and *Correll v. Earley* (Okla. Sup. Ct. 1951) 237 P. (2d) 1017, which hold, despite *Shelley v. Kraemer*, that an action for breach of contract will lie for violation of a racial covenant, even though no injunction may be issued. This seems, nevertheless, to be another form of "state action." See Harry E. Groves, "Judicial Interpretation of the Holdings of the U.S. Supreme Court in the Restrictive Covenant Cases," 45 *Illinois Law Rev.* 614-31 (1950).

Note that some racial covenants fix a penalty for violation. *Torrey v. Wolfes* (App. D.C. 1925) 6 F. (2d) 702 (\$2000). *Roberts v. Curtis* (Dist. Ct., D.C. 1950) 93 F. Supp. 604, holds that *Shelley v. Kraemer* is "broad enough to cover actions for damages" and refuses to enforce a penalty provision like that in *Torrey v. Wolfes*. See also Charles Abrams, "The Segregation Threat in Housing," 7 *Commentary* 123 (1949). Racial cov-

Even if the Supreme Court extends the scope of the decision in *Shelley v. Kraemer*, it appears that extreme care must be taken to give proper legal form to the requirement of the Administrator of the Housing and Home Finance Agency that the local public agency "adopt effective measures to assure" that no racial covenant "may be validly executed" restricting the redeveloped property.

THE BROADER USE OF COVENANTS

The debate of the last five years over the undesirability of racial covenants has perhaps obscured the usefulness of the device of private contract as an affirmative, constructive tool in community building. As will appear in chapter ii, the legal origins of the covenant "running with the land" go back to medieval England (*Pakenham's Case*, 1369). Its history as a tool of urban planning is less than two hundred years old.

USE THROUGH THE EARLY NINETEENTH CENTURY

As early as the seventeenth century, the Earl of Leicester built his town house in London and laid out Leicester Square in front of it. By 1700 the square was surrounded by buildings; in 1748 the center of the square was adorned with a gilded equestrian statue of George I and a fountain, inclosed by an iron fence. In the surge of urban expansion of London in the late eighteenth century, even dukes yielded to the pressures and temptations of higher land values and carved up their town estates into building lots.⁹ Fortunately the Duke of Portland commissioned Nash to lay out Regent's Park, and others intrusted to architects like the brothers Adam the design of the crescents and squares that are, even today, among the most charming and harmonious parts of London. Several of these developments included, like Leicester Square, a private "pleasure park" for the benefit exclusively of the owners and the tenants of the square surrounding the park.

In 1743 the descendants of the Earl of Leicester employed a legal de-

enants may still cause difficulties in cases involving marketability of title. May a purchaser refuse to accept a deed to a property thus restricted when the seller has contracted to deliver "marketable title"?

9. "A considerable number of the more central squares were laid out in the seventeenth and eighteenth centuries and a still larger number were developed by the Dukes of Bedford and Westminster and others between 1801 and 1854" (Thomas Adams, *Recent Advances in Town Planning* [New York: Macmillan Co., 1932], p. 27). The full history of the legal title to Leicester Square and of the litigation about it, from the seventeenth century until 1874, when it became a public park, is recounted in Zechariah Chafee, Jr., and Sidney P. Simpson, *Cases on Equity* (Cambridge, Mass.: The Authors, 1934), I, 704. See also John Summerson, *Georgian London* (New York: Chas. Scribner's Sons, 1946), chaps. xii, xiv, "Great Estates."

vice to assure the exclusive use and the maintenance of the park: they granted long leases of many of the surrounding houses by which the lessees covenanted to pay small yearly sums as a "square rent" or tax toward the upkeep of the garden and the lessors covenanted to apply the rents to this purpose.

In 1808, one Tulk, being the then owner of the "vacant piece of ground in Leicester Square as well as of the several houses forming the Square," transferred the piece of ground, "constituting Leicester Square garden or pleasure ground with the equestrian statue and the rail" fence, to Elms with a covenant in the deed that Elms, his heirs, and assigns would "maintain it in an open state and that it should be lawful for the inhabitants of Leicester Square, tenants of Tulk, on the payment of reasonable rent to have keys at their own expense and the privilege of admission." From Elms through several intermediate conveyances title to the property came to vest in Moxhay, who asserted the right to build on it. The deed to him did not contain this express covenant, but he admitted that he had had notice of the covenant of 1808. Tulk, being still the owner of some of the houses on the square, sought to enjoin him. Out of this episode in 1848 came the leading case of *Tulk v. Moxhay*,¹⁰ in which the Lord Chancellor established the principle that it would be inequitable for Moxhay to be free of his predecessor's covenant, even though he had not personally promised to respect it.

In 1831 Samuel Ruggles drained out the crooked little swamp in Manhattan (*Krom mersche*, as the Dutch called it) through which Cedar Creek flowed from what is now Madison Square to the East River, "laid out a square in the London fashion, and surrounded it with an eight-foot fence, with gates to which residents in the neighborhood have keys"¹¹—Gramercy Park. Ruggles vested title to the park in trustees for the benefit of the owners of the sixty-six surrounding plots; and this legal device still serves although many of the town houses have been replaced by apartment buildings and residential hotels, whose tenants are equally entitled to the use of the keys.

The only court case about Gramercy Park important for our purposes arose soon after the consolidation of the Greater City of New York. Under the new charter, the principle of assessment at full value was established and the Commissioners of Taxes and Assessments were required to assess land and improvements separately: "to state under oath what sum in their judgment each parcel would sell for under

10. (Chancery, 1848) 2 Phillips 774, 41 Eng. Rep. 1143.

11. Cleveland Rodgers, and Rebecca Rankin, *New York: The World's Capital City* (New York: Harper & Bros., 1948), p. 253.

ordinary circumstances if wholly unimproved." For the years 1903 and 1904 Gramercy Park was accordingly assessed for \$500,000; for 1905, for \$750,000.

Poor and his fellow trustees pointed to the practice of tax commissions, since the park's establishment, of including in the assessment of the sixty-six surrounding parcels (the "dominant tenements") the value of their owners' exclusive rights to the use of the park; these lots were assessed at more than comparable lots elsewhere. Indeed, the court pointed out that even in 1903 and 1904 the Commissioners had added \$660,000 in value to the surrounding lots, more than the value they attributed to the land in the park.

The court did not declare the private park tax exempt; but it held that subject to the restrictions it had no value and could not have been sold since 1831 for any price whatever.¹² This adaptation of the law to the needs of community development has been of service at Radburn, New Jersey and elsewhere, as will appear below.

USE IN THE LATE NINETEENTH CENTURY

The law reports of the late nineteenth century are full of decisions building up a coral reef on which more recent attempts to use the contract to protect community development have often scraped bottom—and sometimes been wrecked. Many of these cases involved merely the break-up of an estate into a handful of lots. The lawyers who drafted the instruments and the judges before whom they argued, trained by reading Coke and Blackstone, seem often to have gotten pleasure out of a nice point of medieval law instead of seeking to shape legal tools for the emerging needs of urbanization. Basically, these decisions are the product of an era which glorified freedom of a purchaser of land to use his property as he saw fit and during which the expansion of cities produced changes of use and increases in land values tempting later owners to try to get out from under cramping restrictions.

Several of the more significant community schemes of the time were seaside sectarian camp meetings, begun as tent colonies for a fortnight's revival, gradually witnessing the triumph of the summer vacation resort. Prohibitions against secular activities then seemed onerous. Opportunities for profit exerted financial pressure on land dedicated to religion and meditation. The "Great Park Case" of Cottage City (now Oak Bluffs), Martha's Vineyard, had its beginning in 1873. In 1885 the startled cottagers were informed that the parks on which their homes fronted were the private property of a shrewd operator from the mainland who had bought a quit-claim deed from the insolvent develop-

12. *People ex rel. Poor v. Wells* (1910) 139 App. Div. 83, affirmed (1910) 200 N.Y. 518, 93 N.E. 1129.

ment company and were faced with the bland blackmail that he proposed to sell the parks off as building lots. It took seven years of litigation and a decision by Oliver Wendell Holmes to unsnarl a tangle resulting largely from inept original draftsmanship in a time of good will and mutual trust.¹³

Ocean Grove, New Jersey, began similarly with provision for "space allotted to camp ground" on blocks specified on the map. When the Ocean City Association decided that tenting on the camp ground had proved a failure and proposed to sell the land for building sites, the court enjoined the auction at the instance of a cottage owner who claimed that unrestricted permanent buildings would block his view of the ocean.¹⁴

In looking back on several decades of this kind of litigation, a New Jersey judge seized on the then new phenomenon of aviation for a pregnant comparison:

A neighborhood restrictive scheme, like an aeroplane in the sky, has a constant and ever-pulling tendency to come down. The law of gravity pulls down always on the aeroplane; the adverse policy of the common law and the trait of human nature which prompts every one to step a little ahead of his neighbor exert a constant and like tendency upon the neighborhood scheme.¹⁵

TWENTIETH CENTURY USE IN LARGE-SCALE SUBDIVISIONS

It was around the turn of the century that far-seeing real estate subdividers sensed a market in our rapidly growing cities for communities of homes whose extra value would be partly in amenity of planning and partly in assurance that the graciousness of environment would be protected. Improved transportation made readily accessible tracts on the fringe of the city, large enough to create their own quality and atmosphere of neighborhood and community.

Roland Park to the northwest of Baltimore was one of the first. Under the guidance of Edward Bouton and his associates, with its extensions of Guilford and Homeland, Roland Park dominated the market for gracious home sites in Baltimore from 1891 almost till World War II. Its site plan was the work of Frederick Law Olmsted, the foremost American landscape architect.

In 1911 the Russell Sage Foundation, a charitable trust established by Mrs. Olivia Slocum Sage for social welfare, began Forest Hills Gardens, only nine miles from Broadway, New York, "to provide more healthful and attractive homes to many people. It will demonstrate

13. This episode is racily recounted in chapter xxv of Henry B. Hough, *Martha's Vineyard, Summer Resort, 1835-1935* (Rutland, Vt.: The Tuttle Publishing Co., 1936), pp. 164-82.

14. *Lenning v. Ocean City Association* (1886) 41 N.J.Eq. 606.

15. *Scull v. Eilenberg* (1923) 94 N.J.Eq. 759.

that more tasteful surroundings and open spaces pay in suburban development and thereby encourage imitation."¹⁶ The site plan was the work of Olmsted Brothers of Brookline, Massachusetts, the firm founded by Frederick Law Olmsted, who died in 1903. It was out of his studies on the staff of the Foundation that Clarence A. Perry evolved his principles of the neighborhood unit, which, although recently subjected to critical re-evaluation, have been influential in urban planning for more than two decades.

Like Roland Park, Forest Hills Gardens relied for its protection on a scheme of deed restrictions. A decade later, when the Foundation had practically completed its work and had sold a great bulk of the 174-acre tract, it created a Gardens Corporation, to which it transferred title to the common spaces and the power to enforce the restrictions.

Just as engineers retained by cities to make a city plan commonly presented a draft zoning ordinance as part of their professional services, Olmsted Brothers along with their site-development plans offered their clients advice on deed restrictions. In 1925 a partner of the firm who was also a professor at Harvard presented a tabular analysis of the provisions of twenty-nine sets of restrictions on properties planned by the firm.¹⁷

In 1928 the Institute for Research in Land Economics and Public Utilities published a definitive monograph, *The Use of Deed Restrictions in Subdivision Development*, by Helen C. Monchow. At that time, Miss Monchow had for analysis not only the Olmsted Brothers' material, but fifty-five other sets of restrictions obtained from the Home Building and Subdividers Division of the National Association of Real Estate Boards, which included in its membership "the developers of most of the better-class subdivisions in the country." Most of these developments reached their peak in the 1920's. J. C. Nichols' 5,000-acre Country Club District, Kansas City, is an outstanding early example; others are Frank Vanderlip's 3,200-acre headland over the Pacific, Palos Verdes, and the Van Sweringens' Shaker Heights, near Cleveland. It would be superfluous to name others, but they stretch from Maine to Texas and from Florida to British Columbia.

The depression and war years naturally impeded further such developments. Toward the end of the war the Urban Land Institute con-

16. Forest Hills Gardens is described on pp. 90-100 of the monograph, "The Neighborhood Unit," by Clarence A. Perry, in *Regional Survey of New York and Its Environs*, Vol. VII: *Neighborhood and Community Planning* (New York: Regional Plan of New York and Its Environs, 1929). The Declaration of Restrictions and the Charter and By-Laws of the Gardens Corporation are printed in full on pp. 132-40.

17. Henry V. Hubbard, "Land Subdivision Restrictions," *Landscape Architecture* (October, 1925). See also "Restrictments for Residential Subdivisions and Related Matters—A General Report by Olmsted Brothers," January, 1925. A mimeographed copy is in the Library of Harvard Graduate School of Design.

vened a round table of the developers of the 'twenties—now elder statesmen—to record for a new generation the wisdom of their experience. Out of this meeting grew a Community Builders Council, headed by J. C. Nichols (who died in February, 1950) and a *Community Builders' Handbook*, with chapters on "Protecting the Future of the Development" and "Covenants and Homes Associations."¹⁸

Radburn, New Jersey.—One of the planned communities of the 1920's that came to have international reputation was Radburn, New Jersey, the work of City Housing Corporation of New York, a limited-profit corporation of which Alexander M. Bing was president. Intended as an American adaptation of the British garden city (exemplified in Letchworth and Welwyn), it gained greater significance as the first "Town for the Motor Age," showing how to live with or in spite of the automobile.¹⁹

Intended by its backers as a demonstration in community development, it enlisted some of the ablest planners of the English-speaking world—Sir Raymond Unwin, Thomas Adams, Henry Wright, Clarence S. Stein, Frederick L. Ackerman—and men of experience and imagination in community organization like Louis Brownlow, John O. Walker, and Herbert Emmerich. With homes that sold at \$6,600 to \$15,000, it was more of a white-collar community than a residential subdivision for the wealthy, although it did not realize its ambition to become a self-contained "satellite town" with its own industry and homes for workers.

Every step in its planning and organization was done with self-conscious expectation that Radburn would serve as a model. Advisory committees of national experts were consulted in developing its health, recreation, and education programs and its form of government.

Moreover, the residents of Radburn have continued to feel a sense of public responsibility and in 1949–50 the managers of its affairs were ready to co-operate heartily in making available the records of twenty years of the operation of a comprehensive scheme of deed restrictions as a device for community organization. Those who were responsible for the formulation of the scheme have also been available; their experience includes two other communities for which the City Housing Corporation created schemes of deed restrictions—Sunnyside Gardens and Munsey Park, Long Island.

For these reasons, a somewhat detailed statement of the Radburn

18. Community Builders Council, *The Community Builders' Handbook* (Washington: The Urban Land Institute, 1947), 205 pp.

19. The story of the genesis of the "Radburn idea," a full description of Radburn with many maps and photographs and an objective appraisal of its successes and weaknesses, by one of its architect-planners, Clarence S. Stein, appear in *Toward New Towns for America* (Chicago: Public Administration Service, 1951), pp. 37–69.

experience will be offered as chapter iii of a report on the usefulness of deed restrictions in community development.

WHY USE COVENANTS?

LIMITS OF THE POLICE POWER

Basically a covenant is a promise. The owner or occupant of land may freely make promises about ways in which he will or will not use it which the courts and the community would not permit the government to force upon him without his consent.

Modern urban living has created needs for orderly relationships between residential and business use, for restraints on height and bulk of buildings, for limitations on density of population and for the maintenance of standards of occupancy. The courts have sanctioned action by the state to set these limits through zoning ordinances, subdivision control ordinances, building codes, sanitary codes, and other exercises of the "police power"—the right of the state to limit the freedom of the individual without compensation in the paramount interest of the community.

But because these laws operate *in invitum*, as the lawyers say—without regard to the individual's assent—under our constitutional system they can be only broad, general or minimum regulation. Restraints must fall equally on all similarly situated. It would be improper deprivation of property rights to permit one owner in a block to build an apartment house and by law to limit other owners to single-family houses. The planners of Radburn showed that a close interweaving of multi-family and single-family dwellings could yield good living values if the apartment houses were calculated not to overload the parks, sewers, and other community facilities and were designed not to overbalance the neighboring houses in bulk.

To assure the perpetuation of such carefully calculated relationships of varying intensity of land use, it is necessary to rely on promise and consent, rather than on legal regulation. Such regulation of land in many holdings by zoning would probably be declared invalid at present,²⁰ although the newer zoning techniques of floor-area ratios, applied

20. The court cases that might reveal the minimum permissible size of a zoning district usually arise from a complaint against "spot zoning," action by the municipality to allow some property greater freedom than the property around it, a practice frowned upon by most courts. A common instance is permitting multi-family dwellings in an area previously limited to single-family dwellings. Courts in New Jersey have recently upheld over objection such rezoning of tracts as small as 11.6 acres, *Crow v. Westfield* (1947) 136 N.J.L. 363, 56 A. (2d) 403; 21 acres, *Plass v. Bloomfield* (1946) 134 N.J.L. 580, 49 A. (2d) 476; 32 acres, *Hendlin v. Fairmount Const. Co.* (1950) 8 N.J. Super. 310, 72 A. (2d) 541. The rezoning of 7.647 acres in Philadelphia was upheld where there was evidence of severe topographic difficulty, *Gratton v. Conte* (Pa. Sup. Ct. 1950) 73 A. (2d) 381.

to large tracts in single ownership, would exert many of the controls desired.

The classic formulation of the community interests in behalf of which the police power is exercised is "health, safety and welfare." The late Alfred Bettman, leading lawyer in the planning field, in drafting enabling statutes, expanded the formula to include "health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants." Whatever the phrases used, courts have generally declared invalid attempts to impose some types of minimum standards through the police power, where no reasonable relation to health, safety, and welfare was apparent.

Thus, current epidemics of ranch houses and "economy" houses have led suburban municipalities to adopt regulations for minimum building height. Several courts have declared these unconstitutional.²¹

To the same end, municipalities have prescribed higher standards of floor area in one class of district than in another. On this point a court recently said:

The Township Commissioners may legislate on the floor area of rooms, for this has a direct relationship to public health, but could they say that the minimum floor area of a room in one district must be greater than the minimum floor area in another district? We think not. . . .²²

This method of trying to zone against economy houses has been thrown out by the courts in five states.²³ If there are valid reasons why the perpetuation of such special standards is desirable in a redeveloped

21. *122 Main Street Corporation v. Brockton* (1949) 323 Mass. 646, 84 N.E. (2d) 13, cited in 1 *Zoning Digest* (Chicago: American Society of Planning Officials, 1949) 23. *Brookdale Homes Inc. v. Johnson* (1940) 123 N.J.L. 602, 10 A. (2d) 477, affirmed (1941) 126 N.J.L. 516, 19 A. (2d) 868.

22. *American Veterans Housing Cooperative, Inc. v. Budd et al.* (Court of Common Pleas, Pennsylvania, April, 1949) 1 *Zoning Digest*, 143. The human story of the action by a community of estate owners in a Philadelphia Main Line county to block this veterans' co-operative housing project is movingly told by Morton H. Hunt, "The Battle of Abington Township," 9 *Commentary*, 234 (March, 1950).

23. "Minimum Building Requirements Generally Held Illegal," 2 *Zoning Digest*, 81 (June, 1950). See also the discussions of *Lionshead Lake v. Wayne Township* (N.J. Super. Ct. 1951, 80 A. (2d) 650 in 3 *Zoning Digest*, 129 (September, 1951) and in 66 *American City*, 130-31 (October, 1951, by Norman Williams, Jr.). A Texas court has upheld an ordinance prescribing 900 square feet in a residence "B" district. *Thompson v. City of Carrollton* (1948), 211 S.W. (2d) 970.

Where the ordinance has the same minimum area requirement in all classes of districts, and that minimum is demonstrated to have a basis in health, it has been upheld in *Lionshead Lake, Inc. v. Township of Wayne* (N.J. Sup. Ct. 1952) expressly overruling *Brookdale Homes, Inc. v. Johnson*, footnote 21 above. Here the requirement was 768 square feet for a one-story building—higher than that of the Federal Housing Administration. The court relied upon *Planning the Home for Occupancy* (Chicago: Public Administration Service, 1950), a report of the Committee on the Hygiene of Housing of the American Public Health Association.

area, the redevelopment agency will probably have to rely upon the consent of the purchaser.

ARCHITECTURAL CONTROL

This report is not the place for an extended discussion of the use of the police power for aesthetics. Chief Judge Pound's graceful allegory states the position of the courts as accurately, for our purposes, as would an extended review of the cases: "Beauty may not be queen, but she is not an outcast beyond the pale of protection or respect. She may at least shelter herself under the wing of safety, morality or decency."²⁴

Currently about forty municipalities are known to exercise some control over exterior design of structures, usually through zoning—in many cities only for limited areas, such as entrances to the city, along specified highways, or for the protection of areas of historic interest (Sutter's Fort and the State Capitol in Sacramento, "old and historic" Charleston).

Those interested in the social regulation of urban land may welcome this movement (although it stirred up a debate that carried on for six months in a leading architectural journal),²⁵ but none of the forty municipalities yet reports a review of this exercise of the police power by any higher court.²⁶

If a redevelopment agency wants to assure the power of detailed architectural control, including such matters as the location of buildings on each site (with variant distances from the street), the height, size,

24. *Perlmutter v. Greene* (1932) 259 N.Y. 327, at p. 332, 182 N.E.5,6. Aesthetic control of land along highways (regulation of outdoor advertising, building set-backs and buffer strips, and roadside zoning) is the subject of a 51-page *Bibliography on Roadside Control*, covering only the period since 1930, issued in 1949 by the Bureau of Public Roads, Department of Commerce. See an ingenious legal analysis, which attempts to by-pass the issue under the police power by showing that the property rights ("easements") of the abutting owner do not include an "easement of visibility" extensive enough to support a billboard. Ruth I. Wilson, "Billboards and the Right To Be Seen from the Highway," 30 *Georgetown Law Journal* 723 (1942). This reasoning was adapted in *Kelbro v. Myrick* (1942) 113 Vt. 64, 30 A (2d) 527. See "Aesthetics as the Basis for Zoning," 1 *Zoning Digest* 89 (Sept., 1949); Albert S. Bard, "Beauty's Place in Modern Zoning" 66 *American City*, 129 (August, 1951) with review of the cases.

25. "A Letter from the Publisher," 86 *Architectural Forum* 50 (May, 1947); and Letters to the Editor" in issues from June through October, 1947 (87 *Architectural Forum*, *passim*). The occasion of the controversy (stimulated by the editor) was not control of a residential subdivision but suggested control of a commercial building on Fifth Avenue, New York.

26. In overruling a demurrer to a complaint brought under a county ordinance that included architectural control along one of the country's great scenic highways, a lower court judge said, "Perhaps a higher court will decide that . . . I have attempted to force the hands of the clock forward too rapidly. If so, I am still confident that time will ultimately justify my judgment." Dooling, J., *County of Monterey v. Bassett* (Superior Court, California, Nov., 1938), reprinted in 4 *American Society of Planning Officials News Letter*, 97.

slope of roof, materials, design, color of buildings, fences, or other structures, or of any one or more of these elements, it seems safe to say that it will do better, during the next years, to rely upon the promises of the owners and occupiers of the land than to expect to force these controls upon them through the police power.²⁷

PROVISION OF SPECIAL COMMUNITY SERVICES AND FACILITIES

One of the problems that will often arise in redevelopment was stated succinctly by Clarence A. Perry in the consultations that led to the Radburn scheme: How can a neighborhood in a municipality "carry on a more advanced form of living than the municipality as a whole is ready to afford?"²⁸

Analyses of sources of tax income and of municipal expenditures provide evidence that no residential area (except possibly the most luxurious) pays taxes enough to support the general services of schools, streets, and protection without the contributions of the business and industrial areas. If, therefore, the redeveloped area is to maintain special facilities or services beyond those provided generally by the local government, there must be a supplementary source of revenue. Here is one of the most significant uses of the covenant. Provision can be made by contract to create a fund to meet these special costs. The contract will include a promise by the several owners of property in the area to pay a determined share of these costs. The obligation to make the promised payments can be made a lien upon the land of the promisors and as such will bind the successors in occupancy of the land.

ADMINISTRATION OF A COMMUNITY SCHEME

And finally, the purchasers of land may promise to intrust the operation, maintenance, and enforcement of the community scheme to a body created for that purpose. As will be brought out in a subsequent section, it has cost the courts some pain to fit such a body into medieval conceptions of "privity" and into codes of civil procedure that require that suits be brought in the name of the "real party in interest," so as to give it the necessary status.

Experience has shown that neither maintenance nor enforcement can be left as the responsibility of one or more property owners. In the early years, the developing agency may legitimately take a leading role; indeed it has an obligation to protect the integrity of the scheme against ill-considered acts of the purchasers, however innocent of pur-

27. Information about current practices in forty municipalities is based upon *Planning Advisory Service: Information Report No. 6*, (Chicago: American Society of Planning Officials, 1313 East 60 Street). September, 1949.

28. Charles S. Ascher, "The Extra-Municipal Administration of Radburn: An Experiment in Government by Contract," 18 *National Municipal Review*, 422 (July, 1929).

pose, until they have time to understand the intentions of the developer. Moreover, in the early years, the developing agency usually has substantial financial interests to protect in unsold land or purchase-money obligations.

But as these financial interests become less and as the attention and energies of the developing agency are focused elsewhere, its readiness to incur expense and trouble on behalf of the scheme weakens. And *pari passu*, the residents will increasingly claim the right to participate in and exercise control over the operation of the scheme.

Effective administration involves some cost and will make claim upon community funds that many residents would prefer to see spent in activities that seem more immediately gratifying, but there is now more than a generation of experience to prove that the controls cannot be left to a committee of volunteers.²⁹ And it is questionable in the light of experience in privately sponsored community schemes, whether a public redevelopment agency can wisely or effectively look forward to direct maintenance of the special community services.

Public housing authorities have assumed extensive responsibilities for recreational and social activities in their projects and, in view of their obligations for operation and maintenance, have developed measures for enlisting the participation of tenants and for sanctions against nonco-operating tenants. The Housing Act of 1949 places emphasis upon "providing maximum opportunity for the redevelopment of project areas by private enterprise" (Sec. 102 [a]) and provides specifically for turning over land to be used for low-rent public housing to a public housing agency against payment (Sec. 107).

Accordingly, it does not appear at this stage that redevelopment agencies will find themselves involved in the detailed management and operation of redeveloped properties. Their role will be less like that of a public housing agency and more like that of a developer, who must devise some external mechanism for administering the desired controls and facilities, in which the occupiers can have some voice. These mechanisms are the subject of chapters ii and iii of this monograph.

TYPES OF REDEVELOPMENT IN WHICH COVENANTS CAN BE USEFUL

Under the Housing Act of 1949, federal assistance is available for several types of projects, distinguished both in terms of their present use and of the use for which they are to be redeveloped. In terms of present use there are: the slum or deteriorating area now predominantly resi-

29. With due respect to the model clauses to that effect offered subdividers by the Federal Housing Administration, FHA Form 2084-b.

dential in character; any other deteriorating area which is to be developed for predominantly residential use; predominantly open land which substantially impairs or arrests sound community growth and which is to be redeveloped for predominantly residential use; open land necessary for sound community growth, to be developed for predominantly residential use (Sec. 110 [c]).

If the proposed use is predominantly residential, federal aid is available for redevelopment of land of any of the four categories. If the use proposed is *not* primarily residential, federal aid is available only to redevelop land of the first type, a slum that is now predominantly residential. A proposed redevelopment will be deemed predominantly residential even though commercial or industrial use may be interwoven in the project.

"DEAD" LAND KILLED BY INEPT AND UNCO-ORDINATED RESTRICTIONS

The Act mentions several characteristics that identify predominantly open land that substantially impairs or arrests sound community growth: obsolete platting, diversity of ownership, deterioration of site improvements. This is a statutory short-hand description of the premature, outmoded, and dead subdivisions that ring our cities and that have been described in a substantial body of literature.³⁰ While they are thought of primarily as memorials of the 1920's, many are relics of land booms of the 1890's.

Originally the problem of dead subdivisions was considered largely one of "getting the land back on the tax rolls." Increasingly, in the last decade, it has been recognized as a broader problem of fitting the dead lots into an affirmative program of land use.³¹ Most of the studies and reports emphasize the sterilizing effect of bad land planning—lots too narrow, no provision for public spaces, bad traffic circulation. It is noteworthy for this report that in some localities it is recognized that poorly conceived and unco-ordinated restrictions have contributed to the killing of the now dead land.

Thus the Michigan Planning Commission, in *A Study of Subdivision Development in the Detroit Metropolitan Area* (1939) illustrates by charts and maps how "Unrelated Subdivision Restrictions Have Created Problem Areas" (pp. 16–23). Vacant plats in Garden City and Inkster show a checkerboard of varying building-cost restrictions and

30. The classic study is Philip H. Cornick, *Premature Subdivision and Its Economic Consequences* (New York: Institute of Public Administration, 1938). A dynamic recent report, showing the growing interest of housing agencies in this problem, is Housing Authority of the County of Cook, Illinois, "Dead" Land, *A Report to the Illinois State Housing Board*, 1949 (with bibliography).

31. *A Program for the Use of Tax-Abandoned Lands* (Chicago: American Society of Planning Officials, 1942).

race-occupancy restrictions. Restrictions of record in four townships are analyzed to show widely varying requirements of building lines, building cost, type of construction, etc. There is graphic evidence of the "strangulation" of a "high-class" subdivision (restricted to buildings costing \$15,000 or more). When the area developed slowly, the promoter threw adjacent property on the market (on an unrecorded plat, with metes and bounds descriptions) upon which houses were built costing less than \$1,000. In twelve years no dwelling was built in the highly restricted area. Says the Commission:

It is apparent, therefore, that restrictions devised by individual subdividers as a protection to their own subdivision developments frequently have no relation to surrounding property and in many cases defeat their own purpose. Their failure to conform to any plan under some form of official control which could protect the interests of all parties concerned has created a multitude of problem areas which can neither be reorganized nor liquidated without expense, delays and legal entanglements (p. 23).

It is suggested, therefore, that due attention be given to inappropriate or unco-ordinated restrictions as factors which substantially impair or arrest sound community growth in proposals for the redevelopment of predominantly open land for predominantly residential use, the third category of project mentioned in the Act of 1949.

USEFULNESS NOT LIMITED TO PROJECTS ON OPEN LAND

This brief review shows that covenants have heretofore been most strikingly used in large-scale residential subdivisions for purchasers who could afford the extra costs of protection of graciousness and amenity. Mention has been made of widespread but less effective use in small subdivisions which could not create their own neighborhood atmosphere or carry the weight of administrative and enforcement machinery.

A number of well-organized subdivisions intended as neighborhoods for the middle class have found themselves gradually but inexorably turned into districts for the wealthy, who were attracted by the amenity and could outbid the group for whom the project had been conceived. Forest Hills Gardens, begun under philanthropic auspices, is a notable example.³²

32. In 1927, the Metropolitan Museum of Art, residuary legatee of Frank A. Munsey, retained City Housing Corporation as its agent to develop Munsey's country estate on the north shore of Long Island into a subdivision. In their desire to liquidate the holding, the Museum trustees had first contracted with Joseph P. Day for an auction of lots, but thought better of it and bought his contract. City Housing Corporation, with Frederick L. Ackerman as supervising architect under the restrictive covenants, initially built houses to establish the tone of the community, to sell at \$16,000-\$18,000. Within a year or two, land purchasers were submitting plans for \$30,000 to \$40,000 houses.

It might appear at first sight that covenants could be a useful tool primarily, if not exclusively, in developments of the third and fourth type described in section 110 (c) of the Housing Act of 1949, predominantly or totally open land. Heretofore, of course, it has been easier to impose a community scheme at the time of subjecting open land to development, because that was the only moment when the entire area was in unitary ownership and control and the seed of common-law "privities" could sprout.³³ Almost the only type of covenant that it has been possible to induce many owners of small holdings to adopt is one to "protect" their neighborhood against a threatened invasion of Negroes.³⁴

But the entry of the redevelopment agency brings about a significant change. A moment is now created when even a slum or deteriorated area comes into unitary ownership and control and is the subject of a comprehensive redevelopment plan. At that moment, a scheme of covenants can be imposed as readily as though the area were open land.

USEFULNESS NOT LIMITED TO RESIDENTIAL DEVELOPMENT

Because of their very size, residential subdivisions such as Palos Verdes, Shaker Heights, and the Country Club District necessarily embraced local shopping centers, recreational commons, fire houses, and other community services. Indeed one of the purposes of the covenants in these higher-priced subdivisions was to control business use, to protect both the amenity of the home-owners and the profit of the developers.

The experience of Radburn suggests that a scheme of covenants can be used even when portions of the area "may be used for commercial or industrial purposes or may otherwise be nonresidential in character."³⁵ Even though Radburn never became a self-contained "satellite town," some industrial property came under the scheme and the enforcing

33. Charles H. Cheney, the consultant for Palos Verdes, California, prepared a set of deed restrictions about the size of a city charter. "It embodies, with elaborations and additions by Mr. Cheney, the attorneys for the Commonwealth Trust Company and the Bank of America in Los Angeles and the management of the project, practically all of the kinds of restrictions and covenants of any value to be found in any of the important residential development of the United States" (comment by Olmsted Brothers, in "General Report," cited in footnote 17). Mr. Cheney collaborated with several owners in Montecito, the estate area south of Santa Barbara ("millionaire colony,"—Alsberg, *The American Guide* [1949], p. 1163) to bring about the voluntary adoption of a comparable set of covenants to protect that American *Côte d'Azur*. He failed, in some measure, because each owner inevitably sought the opinion of his attorney and each attorney inevitably suggested some amendment.

34. Note that the covenant in *Burke v. Kleiman* (1934) 277 Ill. App. 519, by its terms was not to become effective until signed by 95 per cent of the owners in the area.

35. And still be deemed "predominantly residential in character" for purposes of federal aid under Title I of the Housing Act of 1949, HHFA, *Guide*, p. 7.

agency had to deal with problems arising from industrial use of land, as will be recounted in chapter iii.

Furthermore, as will appear in chapter ii, much of the body of case law on "affirmative equitable servitudes" has arisen from industrial use of land. Opportunities may appear in redevelopment schemes under the Housing Act of 1949 to make use of these precedents which were of no concern to the development of residential subdivisions.

USEFULNESS NOT LIMITED TO COMMUNITIES OF HOME OWNERS

Of the families in Radburn subject to the restrictions and entitled to their benefits, about one-fifth are tenants in multi-family or two-family dwellings. In twenty years they have presented no special legal problem. During the depression another one-fifth were tenants of a mortgagee-in-possession of single-family houses; as will appear, the slight special (legal) problems they presented were easily dealt with (see pp. 289-91).

It should be clearly recognized that pressures on Gramercy Park since apartment houses and hotels have replaced many of the single-family houses of the nineteenth century are not the result of tenancy, but of changes in the density of population. Where, as at Radburn, the apartment houses are *planned* into the area, these pressures do not arise.

COMPARATIVE EASE OF LEASEHOLD AS CONTROL DEVICE

There is no doubt that the purposes for which restrictive covenants are imposed on the sale of land are legally more simply achieved by clauses in leases. The *mystique* of "privity" and "covenants running with the land" is dispelled like a fog under the sun's rays. Friendly and informed British observers have commented on the greater ease and effectiveness of the leasehold, so commonly used in England, as an instrument of control.³⁶ However, the decision whether to use leaseholds instead of conveyance in fee in redevelopment will not be made on this ground. It involves much broader questions of finance, acceptability, modifications in what Thorsten Veblen called "the affections of business men." These questions are outside the scope of this monograph.³⁷ If the redevelopment agency decides that transfers in fee simple are es-

36. F. J. Osborn, "On Cities in the U.S.A.—Part II," *International Federation for Housing and Town Planning News Sheet*, XV (Dec., 1949), 6.

37. They are succinctly reviewed in William L. Slayton, *Leasehold as a Method of Disposing of Redevelopment Sites* (Chicago: National Association of Housing Officials, 1950, "Special Publication No. 1, for Subscribers to Redevelopment Information Service"). Mr. Slayton, while temperately reciting the obstacles (mostly in custom, habit, and tradition), makes a good case for the wider use of leaseholds. He provides a selected bibliography.

essential in its community to carry out the mandate of the Housing Act of 1949 to provide "maximum opportunity for the redevelopment of project areas by private enterprise," (Sec. 102 [a]) then restrictive covenants will be useful in establishing those public controls that the Urban Land Institute includes in its statement of the principles of urban redevelopment.³⁸

With this brief presentation of the role of covenants in redevelopment, we propose in chapter ii to devote some attention to the legal principles governing covenants. Chapter iii will describe the "experiment in extramunicipal administration" of Radburn, explain its legal framework, and report on its operation over a twenty-year period, as a case study that may be helpful to redevelopment agencies.

38. "Principles of Urban Redevelopment Restated," *Urban Land* (March 1947), p. 3. Principle No. 8, "Public Controls"; No. 13, "Modification of Redevelopment Plan."

CHAPTER II

THE LEGAL BASIS OF COVENANTS IN COMMUNITY SCHEMES

THIS report cannot pretend to be an exhaustive legal treatise nor will it be a handbook with forms into which the attorney for a redevelopment agency has but to insert the names of the parties and the description of the property. Yet it may be helpful to understand broadly what covenants can and cannot be expected to accomplish.

SOME CAUTIONARY EXAMPLES

Even a quick survey of the literature, in articles and court decisions, shows instances in which the apparent intent of the developer and the purchasers has been thwarted by ineptitude of draftsmanship, revealing what sometimes seems glaring ignorance of the relevant principles of the governing law of real property.

To cite one example, a sociologist with long experience in housing was recently dismayed by this provision included in 1946 in the deeds to a development of two hundred homes in Westchester County, New York:

No portion of said premises shall be conveyed or in any way transferred, and no land and any improvement thereon shall be let to any person . . . by any owner thereof without the written consent of the Company to such conveyance, transfer, letting or subletting.¹

1. John P. Dean, "Only Caucasian: A Study of Race Covenants," 27 *Journal of Land and Public Utility Economics*, 432 (1947). An elaborate provision for such control of sale or occupancy has been included since 1926 in deeds to lots in Shaker Heights by the Van Sweringen Company of Cleveland. A recent handbook for developers says that "this provision has created a great deal of comment among developers" Stanley L. McMichael, *Real Estate Subdivisions* [New York: Prentice-Hall, Inc., 1949], p. 174. Whether the comment is of incredulity or envy, Mr. McMichael does not state. In its clause, the Van Sweringen Company agrees not to withhold its consent if the lot-owner can present the written consent of a majority of the owners of lots "within a distance of five sublots from the . . . boundary lines of the premises" in every direction, abutting and facing. If the developing company goes out of business, the consents of the neighbors shall be sufficient. Joseph C. Hostetler, Esq., long one of the attorneys for the Van Sweringen interests, is reasonably certain that there has never been a court decision about the enforceability of this covenant.

One can forgive a sociologist for being unaware that this restriction is legally invalid, but it is hard to imagine that the attorneys for the company and for the two hundred purchasers did not know of the legal doctrine against restraints on alienation which this provision violates.²

The principle is succinctly summarized by the American Law Institute in its *Restatement of the Law of Property*:

§ 406 . . . a restraint on the alienation of a legal possessory estate in fee simple . . . is valid . . . only if . . . (b) the restraint is qualified so as to permit alienation to some though not to all possible alienees and (c) the restraint is reasonable under the circumstances.³

To cite but one more example, in 1929 an enterprising law publisher offered a collection of forms to serve the practitioner as precedents in drafting real estate documents. In the slim section on "Restrictive Covenants," the author presented as models a loose sheaf of clauses, including this provision:

. . . except . . . that . . . the above covenants or restrictions or any of them may be altered or annulled at any time . . . by written agreement by and between the First Party, [grantor], its successors or assigns, and the owner for the time being of the premises . . . and said agreement shall be effectual to alter or annul . . . without the consent of the owner or owners of any adjacent premises.⁴

What the author failed to disclose to his readers was that the Court of Appeals of New York had declared title to property subject to these restrictions unmarketable and had relieved a buyer of the obligation to go through with his contract to purchase. Said the court:

A restriction "with a string to it" does not restrain if its creator sees fit to pull the string. . . . The restrictions were not usual, mutual, uniform or reasonable, because they restrained one party and by express agreement opened the door wide to the other.⁵

Not only this, but a set of covenants with precisely the same provision came before the New York court a decade later. The developer had sold about three hundred houses over ten square blocks with restrictive covenants and still owned \$500,000 purchase-money mortgages on the houses sold. He sought to restrain the defendant from using his restricted lot for business. The Appellate Court said:

2. Let us hope that the attorneys for the purchasers recognized its invalidity and therefore advised their clients not to argue about it.

3. St. Paul: American Law Institute Publishers (1944), IV, 2393. Illustration No. 15, on p. 2406, presents precisely this case and concludes: "The injunction is denied because the promissory restraint . . . is invalid."

4. Saul Gordon, *Annotated Real Estate Forms* (New York: Standard Law Book Co., 1929), p. 347. The same clause appears in the current edition, Gordon, *Standard Annotated Real Estate Forms* (New York: Prentice-Hall, Inc., 1945), p. 462.

5. *Sohns v. Beavis* (1911) 200 N.Y. 268, 273, 93 N.E. 935, 937.

There is no uniform plan of development under beneficial restrictions, enforceable by any grantee against any other. The provisions reserving to the grantor control over the restrictions prevented any mutuality of covenant and consideration between grantees and marked the covenant as being for the benefit of the grantor.

Such a covenant was undoubtedly "within the competency of the parties to the grant," the court said, but not the basis for a preliminary injunction. Under these restrictions, the grantor might sell free of the covenant: "It may do this for any reason which moves it and so may utterly destroy the uniform scheme of building which, it is suggested, the covenants were exacted to secure."⁶

These examples are presented in some detail to suggest that not all lawyers—indeed not all specialists in real estate law—can be assumed to be familiar with the law of servitudes. Perhaps there is the good reason that few lawyers have occasion to draft sets of covenants more than once or twice in their practice. Even then it appears that they cannot be sure of competent guidance from their reference tools.⁷

UNDERLYING LEGAL PRINCIPLES

The American Law Institute, over a period of ten years, through reporters, advisers, committees, and plenary sessions, recently undertook to propound a statement that would authoritatively present the law of property at least as it is, with no pretensions to state the law as it should be. This *Restatement of the Law of Property* appeared in five volumes: two, issued in 1944, state propositions affecting our subject.⁸ It was a massive effort, carried out by leaders of the bench, bar, and law schools, and a work of utility, yet its drafting shows wide divergence of view among the most eminent and respectable scholars, and the materials collected in its preparation constituted what could well have been characterized by a description recently used in a different context: "a massive body of case law, irreconcilable in its inconsis-

6. *Brighton-by-the-Sea, Inc. v. Rivkin* (N.Y. 1922) 201 App. Div. 726; 195 N.Y. Supp. 385, followed in *Ludlum v. Haskins* (1941) 177 Misc. 103, 28 N.Y. Supp. (2d) 384, modified on other points on appeal (1944) 291 N.Y. 811, 53 N.E. (2d) 574.

7. The drafting of the Radburn restrictions was preceded by the analysis of more than fifty sets of covenants, by visits to Roland Park, Forest Hills, Olmsted Brothers, the Library of the Harvard School of Landscape Architecture, and by an extensive search of the cases in New Jersey and other states. A dozen or more experts in municipal government advised on the basic pattern. The draft was reviewed by a panel of specialists in real estate and municipal law. See Ascher, "The Extra-Municipal Administration of Radburn: An Experiment in Government by Control" 18 *National Municipal Review*, 442 (July, 1929).

8. Vol. IV: *Social Restrictions Imposed on the Creation of Property Interests*, especially Part I: "The Common Law Rule Against Perpetuities"; Part II: "Restraints on Alienation"; Vol. V: *Servitudes*: especially Part I: "Easements"; Part III: "Promises Respecting the Use of Land."

ency, confusing in its detail, and defiant of all attempts at classification."⁹ It has left in its wake strong dissents on important but highly technical propositions.¹⁰

The confusion results from the evolution of the law of covenants and servitudes over a period of nearly eight hundred years; it is enhanced because several legal principles are involved, each of which has its own tortuous history. The greatest difficulty has been to blend them into a coherent body of working doctrine. It is hard to reconcile opinions of judges who have given major attention now to one, then to another of the underlying principles. Anyone attempting a brief review must take refuge in the usual cautions that not all the statements made will be the law in any one state. It should be abundantly clear by now that competent legal counsel must be sought. Nevertheless, it should be possible to describe in not too forbidding language the basic problems of law involved and the ways in which justices and chancellors have striven to meet them.

THE COVENANT AS A PROMISE

The undertakings that are the subject matter of covenants may be viewed simply as promises. The promise may be an agreement to do something affirmative (to keep a house in good repair, to maintain a walk, to pay a sum of money annually toward a common fund); or negatively, to refrain from doing something upon one's land (not to build a house less than two stories high or costing less than \$10,000) or to permit someone else to do something about one's land (to cross over it or to receive unimpeded light and air from it).

The courts of law have never found difficulty in enforcing, between the parties, any reasonable promise (that does not contravene "public policy"). But the law court's remedy for the breach of a promise is a judgment in money damages, and this remedy is frequently no real satisfaction when the subject matter of the promise is conduct concerning the use of land.

Historically, across the centuries, the law courts have had trouble in extending the effect of promises beyond the original parties. It took a long time to establish the right to transfer the benefit of the promise; what lawyers call "the assignability of choses-in-action" has a tortuous history of its own. And it took even longer to find a legal basis to per-

9. "The Public Use Limitation on Eminent Domain" 58 *Yale Law Journal* 606 (1949). In a review of Judge Clark's book, Myres S. McDougal speaks of "the unslaked bewilderment on judicial opinion and decision" in the cases on Covenants. 58 *Yale Law Journal* 501 (1949).

10. Charles E. Clark, *Real Covenants and Other Interests Which "Run with Land"* (2d ed., Chicago: Callaghan and Co., 1947), Appendix: "Exceptions to the Restatement of the Law of Real Covenants."

mit a third person for whose benefit the promise was made to sue upon it.

It was still harder for a law court to find a way to make a promise binding on some one other than the original promisor, such as the purchaser of the promisor's property. But even a law court was unwilling to see such a person "unjustly enriched" by escaping from the obligation of the promise and came to treat him "as though" he had promised. It could hold him liable under a principle of "quasi-contract."

Many promises arise out of transactions which involve the use of land incidentally and which courts construe to be chiefly personal to the parties. In cases which the court construes thus, it will not strive to extend the benefit or the burden of the promise to others who are subsequently concerned with the land.

For example, in *Harrison-Rye Realty Corp. v. Crigler*, the plaintiff, an assignee of the original developer, sought to collect from the defendant lot-owner an agreed payment toward the maintenance of the private streets in a subdivision. The court undertook to construe the covenants "in the light of the intent of the parties." It noted that the defendant was obligated to pay, "so long as the first party will care for the streets," and that such broad discretion had been left to "the first party" in determining what care to give the streets that "the parties did not contemplate" that the defendant would be bound by discretion exercised by an assignee. The court concluded that the covenants had been "carefully drawn" to make the burden run, but not the benefit. It rendered judgment for the defendant on the ground that the lot-owners' promises were personal to the original developer.¹¹

Again, in *Nassau County v. Kensington Association*, the defendant, a nonprofit membership association, owned and maintained community facilities deeded to it by the developer under the "Kensington Restrictions," established in 1916 "in accordance with a common plan of development." The deed to each purchaser of a lot provided that the purchaser agreed "to pay to the Kensington Association five dollars per year for each lot . . . ; said payments to be binding on any subse-

11. (Sup. Ct., 1945) 61 N.Y. Supp. (2d) 191, affirmed (1947) 272 App. Div. 939, Affirmed (1948) 298 N.Y. 602, 81 N.E. 331. Four years before, the same set of restrictions came before another judge, who reached the opposite conclusion. He concentrated his attention upon other clauses in the instrument and found that the intention to make the covenant run with the land was not clearly expressed. However, he said that the intention was to be gathered not only from the language of the deed but from all the surrounding circumstances. "Considering the nature of the covenant, the fact that it formed part of a scheme . . . and its obvious inadequacy if binding only upon the original parties," he held "that the covenant was intended to run with the land and that it bound the successors of the purchaser, including the defendant." *Harrison-Rye Realty Corp. v. New Rochelle Trust Co.* (Sup. Ct., 1941) 177 Misc. 776, 31 N.Y. Supp. (2d) 1005. The same attorneys represented the plaintiff in both cases, but the defendant in the earlier case did not appeal.

quent owners of said lots." Twenty years later, the county bought some lots at a tax sale and brought this action to have the title to the lots declared free of any claim for the unpaid "assessments" levied after 1929, amounting to about \$600. One of the reasons why the court found for the county was that "the Association is not committed . . . to use the funds collected for any particular purpose or in fact to spend the money at all. . . . The agreement . . . merely provides for the payment of dues in a sort of property owners' association" and thus was not binding on later owners.¹²

These two recent cases have purposely been presented involving what the innocent reader might suppose to have been intended as community schemes. But the history of the doctrines described hangs heavily over them. The omission of a few technical phrases has enabled the court to construe the "intent of the parties" to be that the promises should be personal only, and that neither their benefits nor their burdens should be extended to others subsequently concerned with the land.

THE COVENANT AS AN INTEREST IN LAND OR SERVITUDE

Some undertakings expressed in conveyances are treated as more than personal promises: they are held to create legal interests in the land. One such class is servitudes, a right in land owned by one person by which the land is subjected to a certain use or enjoyment by another person or for the benefit of other land. At common law, an easement is a leading kind of servitude. An easement, as defined in the *Restatement*, is an interest in land in the possession of another which entitles the owner of the interest "to a limited use or enjoyment of the land in which the interest exists" (called the "servient tenement"). Such an interest entitles the holder "to protection as against third persons from interference" in the use or enjoyment and "is not subject to the will of the possessor of the land."¹³ The point to be emphasized is that "the subjection of a possessor of land to an easement in his land is based upon his possession rather than upon his participation in the creation of the easement or his succession in interest to another who, in the first instance, created it."¹⁴

Undertakings that create limited interests in another's land may be affirmative (the right to build a dam on the land, even if flooding results) or negative (the right to continued unobstructed "receipt of light

12. (Sup. Ct. 1940) 21 N.Y. Supp. (2d) 208. Neither party "argued strenuously" the point that the county's tax title was in any event free of any prior claims and the decision was not based upon that possible point.

13. *Restatement of the Law of Property, as Adopted and Promulgated by the American Law Institute*, Vol. V, Sec. 450, p. 2901. There are other elements to the definition.

14. *Restatement*, pp. 2902-3.

and air from . . . the land subject to the easement"). The easement may be "appurtenant" to land when it is created to benefit and benefits the possessor of the land (the "dominant tenement") in his use of the land. It is called an "easement in gross" when the benefit to the possessor is irrespective of his possession of land. If the possessor of the servient tenement interferes with the rights of the owner of the easement, "the right he has violated is a property right and his breach of duty constitutes a tort."¹⁵

As interests in real property, easements were not difficult for the law courts to manipulate. The rules governing their transfer and the transfer of land subject to them followed readily from the rules governing other estates in land. A succeeding possessor of the "servient tenement" could not acquire more than the interests of his predecessor; similarly a new owner of the "dominant tenement" acquired all of his predecessor's interests, including that in the "servient tenement."¹⁶

Easements, as interests in property, have played and continue to play a useful role in the protection of neighborhood amenities; for example, in assurance of access to common spaces, the assurance of continued access to light and air (in England, through the doctrine of "ancient lights"), and the assurance of continued lateral support to land and buildings.

But this neat pattern is inadequate to encompass all the relationships involved in a community scheme of protective restrictions, outlined on pages 234-38 of this report. The agreements for architectural control and for the provision of community facilities do not fit the historic picture of an easement, giving every owner an interest in every other owner's land accruing as a property right to subsequent owners. It is generally accepted that the content of an "easement" was more or less frozen in the early eighteenth century and that "there can be no new easements," in the words of the conveyancers. Occasionally a judge will be found to talk of "mutual negative easements" but, in the light of the great body of decisions, this appears to be an exceptional or at most a metaphorical statement.

THE COVENANT AS AN UNDERTAKING "RUNNING WITH THE LAND"

The undertakings underlying a community scheme, then, cannot receive adequate protection in the law courts viewed as promises between the original parties, nor viewed as interests in land. Since the

15. *Ibid.*, p. 3149.

16. Some courts have had difficulty in extending the benefits of an easement in gross to the beneficiary's successor in interest, since there was no "dominant tenement" the ownership of which the easement in gross could follow. This legal distinction has cast its shadow over the thinking of courts of equity. See pp. 261-63, and the cases there cited.

days of comparatively simple economic relationships in land in the Middle Ages, the law courts have recognized that some promises about the use of land, by their substance and by the intent of the parties, should bind and benefit subsequent users of the land, not parties to the original undertaking.

The need to give force to the evident and valid desires of the parties has been involved, in the words of the *Restatement*, in "the struggle of the English courts to preserve property free from inconvenient fetterings . . . beginning in the thirteenth century and continuing to date." The *Restatement* finds "an unmistakable judicial predilection for minimizing the permissible fetterings of property" and an "assumption that social welfare required . . . restrictions on the fettering of property [which] has never been adequately explored and has seldom been discussed."¹⁷

We stand here before a jungle into which it does not seem necessary to ask the reader of this monograph to penetrate. It is a metaphysical jungle, made impenetrable to the layman by the property lawyer's tendency—inherited from the medieval monks—to hypostatize, to give real substance to insubstantial things. Thus a sixteenth-century judge is reported to have remarked that a certain promise about the use of land "ran with the land," and the phrase "running with the land" has been used for hundreds of years. We must remind ourselves that all legal rights and duties are between persons, none are attributes of land. The true question is: Under what circumstances shall persons subsequently concerned with the land, in their use of the land, be bound by or benefit by the legal rights or duties of their predecessors?

A widely accepted statment of the elements of an undertaking that will (metaphorically) "run with the land"—a "real covenant"—is that there must be (1) observance of due legal form; (2) the intention of the parties that the covenant should so run; (3) a promise of such kind that it may be held "to touch or concern the land" (in the classic words of Lord Coke); and (4) "privity."¹⁸

It is in traversing the third and fourth elements of this definition that the thickets lie. Of the third, Judge Clark says simply: "It has been found impossible to state any absolute tests to determine what covenants touch and concern land and what do not."¹⁹ Seeking to skirt this thicket, the *Restatement* explicitly eschews the use of "touching

17. Vol. IV: Introductory Note, pp. 2123, 2129–33. The Note reviews the several social purposes conceived to underlie the law.

18. Clark, *op. cit.*, pp. 94, 145.

19. *Ibid.*, chap. iv: "The Running of Real Covenants," p. 96. He cites an article by Dean Bigelow setting forth what Judge Clark calls "a scientific method of approach to the problem."

and concerning," resorting instead to the more general, "respecting the use of land."²⁰

But the ultimate mystery is in the fourth element, "privity." This phrase means basically "connection of interest." It is not too hard to understand that a possessor of land who is to be held to the obligation of a promise made by some one else "respecting the use of the land" must have a "connection of interest" with the promisor. This is called "privity of estate."

A parallel connection of interest should exist between the beneficiary of the promise and the person claiming the benefit. Here is a basic difference from an easement, which is "in theory considered as if attached to the land itself so as to pass with it, even in favor of or against" those whose taking has been hostile; "while a real covenant passes only to successors to the estate—privies in estate—of either of the original contracting parties."²¹

It is at this point that the draftsman of the *Restatement* and Judge Clark part company. The *Restatement* would require an additional kind of "privity of estate" to bind a subsequent owner of the land about which the promise was made: privity of estate between the promisor and the promisee. The original "transaction of which the promise is a part" must have included "a transfer of an interest either in the land benefited by or in the land burdened by the performance of the promise" (Sec. 534 [a]).

Judge Clark characterizes this as "an entirely unjustifiable meaning" and charges that it is not a restatement of the existing law nor supported by a preponderance of the reported decisions.²²

Disputation about the meaning of privity of estate, as Judge Clark agrees, seems one of "the ancient battles of property law," little calculated to help in the "attack upon slum clearance, the problems of blighted urban areas . . . the development of low-cost housing and of governmental aids thereto."²³ Unhappily for our purposes, it is not merely a debate between legal scholars. Those seeking to advance ur-

20. *Restatement*, V., 3160-61. A brief and exceedingly general two pages are devoted to "Nature of Promises Respecting the Use of Land," pp. 3150-52.

21. Clark, *op. cit.*, p. 93.

22. *Op. cit.*, p. 111, and "Appendix: Exceptions to the Restatement of the Law of Real Covenants," pp. 206-81.

23. *Ibid.*, pp. 9-10, citing a dozen recent articles in law reviews. The tenor of some of these is that urban redevelopment is possible only under widespread and fresh use of such tools as public ownership of land. Comment: "Public Land Ownership," 52 *Yale Law Journal*, 634 (1943). See comment: "Urban Redevelopment" 54 *Yale Law Journal*, 116 (1944); Myres S. McDougal, "Legal Questions," *The Problem of the Cities and the Towns* (Cambridge: Conference on Urbanism, Harvard University, 1942), p. 42. Charles S. Ascher, "The Housing Authority and the Housed," 1 *Law and Contemporary Problems* 250 (1934).

ban redevelopment will encounter law courts accustomed to analyze instruments and agreements in these same terms. Lawyers for redevelopment agencies cannot afford to draft documents in disregard of them.

EQUITABLE SERVITUDES

The legal doctrine of covenants running with the land has proved inadequate to meet the needs of urban community development. Take the simple example of the relationship between the purchaser of the first lot sold by the developer and the purchaser of the tenth lot. In nice legal theory, the tenth could sue the first, being a successor in interest to part of the land of the developer remaining after the first sale; but the first could not sue the tenth, being neither the promisee of the tenth purchaser's promise, nor his successor.²⁴

Again, under the law as formulated in the *Restatement*, a promise by a lot purchaser to pay an annual assessment for the maintenance of common facilities owned by trustees or a community association would not be a covenant running with the land so as to subject successive owners to personal liability, since "privity" would be lacking between the trustees or the association and the owner (although the original promise might be effective to create a lien on the land).

The legal machinery to effectuate community schemes

. . . has been found in the main not in the ancient rules of easements or covenants, but in the activity of courts of equity in preventing fraud and unfair dealing. The basis of the modern rules rests upon the equitable doctrine of notice, that he who takes land with notice of a restriction upon it will not in equity and good conscience be permitted to act in violation of the terms of these restrictions.²⁵

The classic early intervention of the chancellor was in the case of *Tulk v. Moxhay*, described on pages 228 ff. Lord Cottenham said:

It is said that the covenant not running with the land, the court cannot enforce it. The question is not whether the covenant runs, but whether a party shall be permitted to use land in a manner inconsistent with his vendor's contract, with notice of which he purchased. . . . If there were a mere agreement and no covenant, this court would enforce it against a party purchasing with notice.²⁶

24. *Restatement*, Vol. V, chap. 46, Sec. 541, Comment f, "General Plan—Earlier and Later Purchasers," p. 3251. The case would be different if the seller made similar promises in the first deed respecting the land retained by him.

25. Clark, *op. cit.*, chap. vi: "The Running of Equitable Restrictions," p. 170. Compliance with recording acts, of course, provides the necessary notice. *Restatement*, Vol. V, Sec. 533, p. 3203.

26. (Chancery, 1848) 2 Phillips 774, 41 Eng. Rep. 1143.

Under now well-established doctrines of equity, where there is evidence of a "community scheme" or "building scheme," any one purchasing in reliance upon the restrictions may sue anyone else holding land in the scheme, no matter when each purchased.²⁷

There will be found two main theories as to the running of equitable restrictions, each of which leads to different decisions on specific issues. Some authorities, like Lord Cottenham in *Tulk v. Moxhay*, enforce the restrictions as contracts concerning land; others treat them substantially as servitudes or "equitable easements" on land.²⁸ Here again, the lawyer for a redevelopment agency will have to note attentively which theory underlies the decisions governing in his jurisdiction and draft his clauses accordingly.

AFFIRMATIVE EQUITABLE SERVITUDES

Equitable restrictions are, in a way, shadows or mirrors of "real" (legal) covenants or servitudes; the same shapes appear, for example, those of negative and affirmative servitudes. The English chancellors long expressed unwillingness to enjoin a subsequent owner to undertake positive action respecting his land, partly at least because of a sense that a court was not well suited to serve as that sort of policeman: in their language, to exercise "continuous supervision" over the covenant. As recently as 1913 the New York Court of Appeals followed the English rule in a case involving an agreement by the defendants' predecessor to maintain a shaft to supply water power to the plaintiffs' land. The court held that the agreement created an easement by which the plaintiffs could go upon the defendants' land to repair the shaft (at the plaintiffs' expense), but that "the covenant to construct and maintain the shaft was the personal undertaking of the original grantor and does not run with the land or create an *equitable* liability on the part of the defendants."²⁹

It was in the decades following this case that community schemes became widespread (see pp. 230 ff.). The chief affirmative obligation to which a successor-owner is commonly held in these schemes is to pay money for their maintenance, an obligation substantially different, certainly in a layman's view, from building a mill-shaft.

The courts of most American states did not follow the English dis-

27. Authorities cited in Clark, *op. cit.*, p. 173. Some courts have held that the existence of a community scheme may be established by physical criteria. (Common size of lots, uniform setbacks, land use, etc.) as well as by interpretation of legal instruments. See Myres McDougal and David Huber, *Property, Wealth, Land: Allocation, Planning and Development* (Charlottesville, Va.: Michie Casebook Corporation, 1948), pp. 666-83.

28. Authorities cited in Clark, *op. cit.*, p. 171.

29. *Miller v. Clary* (1913) 210 N.Y. 127, 103 N.E. 1114. Note the reflection of the legal doctrines in determining whether there is *equitable* liability.

tion, and had held subsequent owners to substantial affirmative obligations in equity.³⁰

Within thirteen years the New York courts found exceptions to the principles of *Miller v. Clary* that enabled them to enforce assessments against subsequent owners of plots in a community development,³¹ culminating in the leading case of *Neponsit Property Owners' Association, Inc. v. Emigrant Industrial Savings Bank*.³²

THE RULE AGAINST RESTRAINTS ON ALIENATION

The first cautionary example presented on pages 238-43 demonstrated the impact of an ancient principle of property law with a long and tortuous history, the struggle since feudal times to free the transfer of land from the "dead hand" and to prevent owners, by deed or will, from fettering their successors unreasonably. The *Restatement*, Section 406, quoted on page 245, proclaims that a restraint on the disposition of an estate in property (a "restraint on alienation") is valid "only if . . . (c) the restraint is reasonable under the circumstances." Some state redevelopment laws provide expressly against resale without permission of the agency.³³ Obviously, such statutory provisions supersede any common-law doctrine to the contrary. If a redevelopment authority sought to impose such a limitation by contract without express statutory authority, the question would arise whether it was "reasonable under the circumstances."

The question of duration arises under this rule. The *Restatement* states expressly that "the validity of a restraint on alienation does not depend on any time limit being placed on the duration of the restraint."³⁴ A limitation upon the duration of a restraint is, however, a factor in supporting its reasonableness.³⁵ The *Restatement* offers extended comment on "reasonableness." Note that the "Rule against Restraints on Alienation" is concerned chiefly with limitations on *estates*

30. To build or repair a fence, to pay part of the cost of a party-wall, to furnish gas, to provide drainage, to repair premises, to build a street—all appropriate to an average community scheme; not to mention more onerous commercial and industrial obligations, such as establishing a railroad station, constructing a bridge, maintaining a dam. See "A New Phase in the Development of Affirmative Equitable Servitudes," 51 *Harvard Law Review* 324 (1937), footnote 25. This excellent note traverses the legal doctrines succinctly and places them in the context of modern urban development.

31. *Lawrence Park Realty Co. v. Crichton* (1926) 218 App. Div. 374.

32. (1938) 278 N.Y. 248, 15 N.E. (2d) 793. Note, however, that *Nassau v. Kensington*, footnote 12 above, was decided after the *Neponsit* case, and in the full and acknowledged light of the statements in that decision. So that the need for careful draftsmanship persists.

33. New Jersey, Laws of 1944, ch. 169; Illinois, Laws of 1941, pp. 431-60.

34. Vol. IV, Sec. 406. Comment o, p. 2413, "Necessity of Time Limit on Restraint Otherwise Invalid."

35. *Ibid.*, Sec. 406. Comment i, p. 2406. Six factors supporting reasonableness are listed with five factors supporting unreasonableness.

in land, not with what the *Restatement* specifically calls "promises respecting the use of land." The *Restatement* expressly mentions as restraints "normally valid under the rule stated . . . restraints on the use of property, such as prohibitions against using" it "for other than residential purposes or for the sale of alcoholic beverages."³⁶

THE RULE AGAINST PERPETUITIES

It has already been explained that a grantor cannot validly seek to control the future sale or use of property by requiring that the purchaser obtain the grantor's prior consent (see pp. 244 ff.). Another device to the same end is to reserve an option to the grantor to repurchase the property. This device raises difficulties both economic and legal. In the first place, it is exhausted after the first proffer. If the purchaser offers to resell the property to the grantor, pursuant to the option, and the grantor fails to exercise his option, the purchaser is thereafter free to sell without further offer to the grantor. Experience shows, too, that a group of lot- or home-owners may all offer their properties back to the grantor at the same time (characteristically, at the beginning of a decline or depression, when they are compelled to sell to raise cash). And this may be just the time when the grantor does not have the financial resources to take up the options.

If the covenant reserving the grantor's consent to resale or lease of the property is unlimited in duration, it will run afoul of another ancient legal doctrine. The *Restatement* declares such a reservation invalid, not as a "restraint on alienation," but as a violation of the "rule against perpetuities."³⁷

Except for this instance, the common-law rule against perpetuities has little application to community schemes. The types of covenants regulating structures or restricting uses common to "building schemes" are said to be expressly excluded from the prohibitions of the rule against perpetuities in Section 399 of the *Restatement*. Like the rule against alienation, the rule against perpetuities deals with limitations upon estates in land, not with promises about the use of land. A comment explains that any "undesirable freezing of a locality into a mode of use unsuited to social interests" can be adequately prevented by the rules developed in equity that make such covenants unenforceable "when a change in the condition of the neighborhood makes such enforcement no longer reasonable (see Sec. 564)."³⁸

This explanation is presented here only to dispose of considerable

36. *Ibid.*, Comment b under Sec. 437: "General Rule Determining Validity of Other Restraints," p. 2547.

37. *Restatement*, Vol. IV, Sec. 394, p. 2322.

38. *Restatement*, Vol. IV, Sec. 399, Comment d, p. 2345. See also Comment i under Sec. 404, p. 2389. Accord, *Barton v. Moline Properties, Inc.* (1935) 121 Fla. 683, 103 A.L.R. 725. See below pp. 268-69.

mumbo-jumbo surrounding the duration of restrictive covenants. There may be valid sociological reasons for limiting them to the life of a generation or economic reasons for limiting them to the life of the structures to be controlled;³⁹ there may be various ways of ending the effectiveness of covenants;⁴⁰ but there is no magic principle in a stated term of twenty-five years or thirty-three years or ninety-nine years to avoid legal invalidity.⁴¹

CONDITIONS DISTINGUISHED FROM COVENANTS

One more basic distinction of property law must be explained briefly before we can be confident of understanding the legal basis of covenants on community schemes. Covenants are promises; some may "run with the land"; some may be considered as interests in the land of another; equity may enforce them against subsequent owners under some circumstances where there is no legal remedy. But the remedy for breach of the promise is, at law, money damages; in equity, an injunction for specific performance of the promise (whether it be to act or to refrain from acting). The proprietor remains in possession of his legal estate.

A condition in a conveyance, however, is a limitation upon the "possessory estate" of the grantee. It operates to terminate the estate of the grantee upon noncompliance: the grantee is subject to the loss of his legal rights in the land (a "forfeiture of the estate"); the grantor may re-enter upon the property and the "possessory estate" may revert to him ("right of reverter") upon the grantee's failure to comply with the condition.⁴²

The remedy for breach of a condition is drastic and it is understandable that "the law does not favor forfeitures." The remedy is so forbidding that one would suppose that a developer would hesitate to use it lest purchasers fail to come into his scheme with such a threat over their heads.⁴³

There are two ways in which the law of conditions becomes impor-

39. Helen C. Monchow, *The Use of Deed Restrictions in Subdivision Development*, pp. 56-59.

40. See *Restatement*, Vol. V. Servitudes: chap. 47. "Termination" discussed at pp. 265 ff.

41. *Butler v. Southwest Dairy Products Co.* (Texas, 1941) 146 S.W. (2d) 1036. On the effect of "clearing statutes," which purport automatically to wipe out classes of encumbrances that impair marketability of title after, say, thirty years, see pages 258-60.

42. This is a "condition subsequent." The other main type is a "condition precedent," whereby the grantee does not enter into his "possessory estate" until the fulfilment of the condition. This type will hardly be relevant to a community scheme. It is not important here to pursue the fine distinction between a "condition with right of re-entry" and a "determinable fee"; their effects for our purposes are practically the same.

43. Yet handbooks of real estate practice for subdividers recommend them: "Conditions undoubtedly offer the subdivider the largest possible degree of control over the use of lots sold." Stanley L. McMichael, *Real Estate Subdivisions* (New York: Prentice-Hall, Inc., 1949), p. 185.

tant for our purposes. First, the draftsman may find that he has inadvertently used words that are deemed by the court to create a conditional estate, when all he intended was a "promise respecting the use of the land." The danger is not so much that the court will decree a forfeiture as that it will refuse the relief appropriate to a restriction.⁴⁴

Secondly, a provision in a deed creating a condition subsequent constitutes a perpetual threat of insecurity to the grantee's title that becomes particularly disturbing when he, in turn, comes to sell, perhaps after many years. It may be of the utmost difficulty to establish that the grantee never acted in violation of the condition and that the original grantor may not be entitled to re-enter. If that were established, the grantee would have no possessory estate to sell. The continued existence of potential rights of reverter is at least an encumbrance, at worst a nuisance;⁴⁵ in the language of the property lawyer, it may render title "unmarketable."⁴⁶

"CLEARING STATUTES"

In the middle of the nineteenth century Michigan, Minnesota, and Wisconsin passed statutes providing that *conditions* in conveyances "which are merely nominal and evince no intention of actual or substantial benefit . . . may be wholly disregarded," and a failure to perform the condition should "in no case operate as a forfeiture." A Massachusetts act of 1887 went further: "*Conditions or restrictions*, unlimited as to time, by which the title or use of real property is affected, shall be limited to the term of thirty years after the date of the deed. . . ."⁴⁷ Note that a restriction stated to run for more than thirty years is not touched by this statute.

Minnesota in 1937 broadened its statute to include "all covenants,

44. Given the alternative, a court will disregard the plaintiff's claim to a right of reverter and construe the document as creating a covenant entitling him to injunctive relief, in its eagerness to avoid the extreme penalties of a condition subsequent. See *Rowe v. May* (1940) 44 New Mex. 264, 101 P. (2d) 391; Clark, *op. cit.*, p. 177, footnote 31.

45. A group of German carpenters and woodworkers came to the village of Astoria, Long Island, soon after 1848 and formed an association through which they acquired a tract which was sold to the members of the group as building lots. Protective restrictions in the deeds were worded in such a way as to constitute conditions subsequent. Decades passed, the group disintegrated, Astoria became part of near-in urban New York City. Title insurance companies refused to insure purchasers of land in the tract. A clever lawyer came into possession of the corporate seal and records of the original association and reaped a handsome return by executing releases of the right of reverter for several hundred dollars per lot. The chief memorial of this venture is in the name of "Cabinet Street," Long Island City.

46. One of the comparatively few circumstances in which a redevelopment agency may wish deliberately to reserve a right of re-entry for condition broken is discussed on page 273.

47. Now Mass. Gen. Laws (1932) c. 184, §23 (with exceptions here irrelevant), from Clark, *op. cit.*, chap. viii: "Legislative Restrictions of Running Interests," p. 199.

conditions or restrictions," declared that they should be invalid after thirty years and imposed a six-year limitation on the exercise of a right of re-entry after breach of condition.⁴⁸

In 1941, Judge Charles E. Clark read a paper at a meeting of the Property Law Section of the American Bar Association advocating the general adoption of state laws limiting servitudes (a) to a definite period of years and (b) to the time during which they remain of substantial utility and benefit to the owners. The proposal gained the approval of the property lawyers present. In the light of the considerations set forth in the paragraphs on "Conditions Distinguished from Covenants" in this monograph (pp. 257-58), it is easy to understand why eminent property lawyers like Dean Frazer, Professor Aigler, Henry U. Sims, Esq., and Judge Clark should press for the elimination of the continued threat to marketability of dead encumbrances.

The opportunity presented itself after the meeting to suggest to Judge Clark that his proposal threatened to throw out the baby with the bathwater: that the all-inclusiveness of his proposal failed to give regard to the legitimate use of restrictions as a tool for community development.

When Judge Clark published his paper, he added this statement:

It has been urged that an . . . exception should be stated to avoid the possible untimely termination of desirable developments by way of controlled subdivisions in community real estate planning, a matter I believe of such importance that I am suggesting a possible form of exception.⁴⁹

This exception, he suggested

. . . might be made to depend on the majority action of the landowners in such . . . schemes. It might take one of several forms, such as the execution by a majority of the owners involved of an instrument showing either termination of the restriction or its renewal (for another thirty-year period), depending upon whether easy termination or easy continuance of the restrictions is desired. Tentatively I suggest, however, that it may well be made to depend upon some provision in the original plan, perhaps to the effect that where the restrictions have been created pursuant to a general plan . . . which contains provisions whereby termination or continuance of the restrictions may be had through action of a majority of the present [*sic*. Query: then?] owners of the property, then the provisions of the plan shall govern in place of the statutory provisions.⁵⁰

This recognition of the need to safeguard community plans by one of the strong proponents of "clearing statutes" is stressed here because

48. Minn. Stat. (Mason, Supp. 1940) Sec. 8075. See article by Dean Frazer of the University of Minnesota Law School advocating such legislation in 1919, 3 *Minnesota Law Review*, 320 at p. 338.

49. Charles E. Clark, "Limiting Land Restrictions," 27 *Journal of the American Bar Association*, 737 (1941).

50. *Ibid.*, p. 741, with a footnote, "As appears substantially in the plan set up for the model town of Radburn, N.J."

it is absent in the "Uniform Act Relating to Reverter of Realty," promulgated by the National Conference of Commissioners on Uniform State Laws" in 1946.⁵¹

That draft provides

Sec. 1 (Conditions, Restrictions, Reverters) Every possibility of reverter and every right of entry or power of termination for breach of condition subsequent [and every restrictive covenant]¹ affecting the title or use of real property shall cease to be valid or operative at the expiration of [thirty] years after the effective date of the instrument creating it, *notwithstanding any provision in such instrument*. This section shall not affect any condition, restrictive covenant . . . existing on the effective date of this act . . . nor shall it affect any lease . . . or any easement . . . mortgage or trust . . . [or any restrictive covenant without right of entry or reverter].²

A footnote says noncommittally: "Note: If (1) is in, (2) is out and vice versa." But, as Judge Clark has recognized, "If (1) is in," community schemes are imperiled; if (2) is in, they are safeguarded.

There is no reported adoption of this draft yet in any state. It behooves officials and attorneys interested in urban development (as well as in sound commercial real estate subdivision) to be on guard and to make clear to leaders in the American Bar Association and to legislators considering the adoption of a clearing statute that it is important to exclude the words in bracket (1) in the draft and to include the words in bracket (2). Note also the awkwardness of any attempt to apply a statute of limitations to community schemes. Technically, the restriction on each plot comes into existence when the purchaser assumes the obligation; in a general plan of development, lots may be sold over a period of four or five years. The restrictions would thus remain in force longer on the lots sold later.

There is another class of laws which should be distinguished from these "statutes of limitations." These are the Michigan Marketable Title Act of 1945⁵² and similar laws in other midwestern states (Kansas, Nebraska, South Dakota). These laws provide that "defects in title" originating prior to a certain date (1935 in Michigan) shall not be grounds for rejection of title by a purchaser. In the conveyancer's language, a right of reverter or other limitation would be considered a defect of title. But a purchaser would not be freed, by these laws, from the obligation of a mortgage subject to which he took title, nor, presumably, from the obligation of restrictive covenants created prior to the date fixed.

51. *Handbook of the National Conference . . . , Philadelphia, Oct. 21-26, 1946*: Adoption at p. 158; text of draft at p. 315 (a slight modification of a draft adopted by the Conference in 1944).

52. Michigan, Acts 1945, No. 200, Comp. Laws §565. 101, p. 11763.

APPLICATION OF THE PRINCIPLES TO COMMUNITY SCHEMES

WHO MAY SUE TO ENFORCE RESTRICTIONS?

As we have seen, it is now well established that any owner (including the original developer) may sue any other person in possession in a community scheme in equity. But when the developing agency has disposed of all the land, may it still sue? What property right does it continue to have to serve as the basis of a claim that it is damaged by the defendant's threatened violation? Does a community association to which the maintenance of the scheme is intrusted have any adequate property right, or may it be considered the beneficiary of the original promise?

If the right that a court of equity will protect is considered a shadow of a legal servitude or easement, the developer who has sold all the land or the community association has no "dominant tenement" to which the right is "appurtenant." It must then be an easement "in gross" (see p. 250). The English courts have refused equitable relief in such cases and the courts of some American states have followed them.⁵³

Other American courts have granted equitable relief to the original promisee ("covenantee") who no longer owns land, against a subsequent owner of restricted property, on the ground that ". . . the right to enjoin the breach of restrictive covenants does not depend upon whether the covenantee will be damaged . . . ; the mere breach is sufficient ground for interference by injunction."⁵⁴

The *Restatement* offers the proposition that the beneficiary of a promise running with his land ceases to be entitled to the benefit of the promise when he ceases to own the land unless and "insofar as he is under a legal obligation to see that the promise is performed." A developer may act without being the "duly accredited agent" of all the pur-

53. The cases are cited in Clark, *Real Covenants*, p. 181. Thus, the London County Council approved a developer's plan to lay out streets upon his covenant not to build on two marked plots to facilitate later extension of the streets. The covenant was expressly worded to "run with the land." A subsequent owner (the developer's wife) built on the plots, claiming that since the L.C.C. owned no land, there could be no covenant running with the land. The court held that there was "no equitable interest equivalent to a negative easement" in the L.C.C. The principle of *Tulk v. Moxhay* did not apply where the promisee "had no land capable of enjoying . . . the benefit of the covenant." *L.C.C. v. Allen*, L.R. (1914) 3 K.B. 642. To overcome this decision, Parliament gave the London County Council statutory authority to enforce covenants under the Housing Act, 1923, ch. 24 and the Housing Act, 1935, ch. 40. W. Ivor Jennings, "Courts and Administrative Law—The Experience of English Housing Legislation," 49 *Harvard Law Review* 426 (1936).

54. *Van Sant v. Rose* (1913) 260 Ill. 401, 103 N.E. 194. Note that this court looks upon the covenant as a promise, not as an interest in land. Cases and comments supporting this decision are cited in Clark, *ibid.*, p. 182.

chasers, because, for example, "the individual interest of each may be so small as to be disproportionate to the cost of protecting it by individual action. . . . Out of such circumstances, . . . it is just and equitable to permit a former owner . . . to continue to enforce" a promise.⁵⁵

Experience has shown that it is not wise to rely upon the continued eagerness of the developing agency to be alert to enforce a community scheme when its financial interest has ended (see pp. 237-38). Furthermore, the residents will want to turn to an independent agency in the conduct of which they have a voice. It has long been the practice, in substantial developments, to create a protective association, often in the form of a nonprofit corporation. The developing agency sometimes creates this body before any land is sold, as at Radburn:⁵⁶ sometimes there is provision in the original documents looking to the subsequent creation of the body,⁵⁷ or the rights reserved to the developers "and his assigns" are transferred to such an association.⁵⁸ In either case, the association is usually given express power to sue, both on affirmative promises (to pay a charge) and on negative promises (not to build or alter without architectural approval).

Such community associations are now generally accorded the same status to sue as any beneficiary of a promise respecting the use of land. In the leading case of *Neponsit Property Owners' Association v. Emigrant Industrial Savings Bank*, the defendant expressly raised the objection that the plaintiff had not "succeeded to the ownership of any property of the grantor," that it did not own any property in the residential tract, and that there was therefore no "privity of estate" between the plaintiff and the defendant. Disavowing any general intention to modify rules about "privity," the New York Court of Appeals undertook to "look behind the corporate form of the plaintiff":

Only blind adherence to an ancient formula devised to meet entirely different conditions could constrain the court to hold that a corporation formed as a medium for the enjoyment of common rights of property owners . . . has no cause of action in equity to enforce the covenant upon which such common rights depend.

55. *Restatement*, Vol. V, Secs. 550, 551, and Comments a. and b., pp. 3273-75. It is only to equitable relief that this proposition applies, p. 3275. In support, *Storey et al. as Trustees v. Brugh* (1926) 256 Mass. 101, 152 N.E. 225.

56. See also, *Kennilwood Owners Association, Inc. v. Kennilwood, Inc.* (1939) 28 N.Y. Supp. (2d) 239, affirmed (1941) 262 App. Div. 750, 28 N.Y. Supp. (2d) 154.

57. See, for example, *Neponsit Property Owners' Association, Inc. v. Emigrant Industrial Savings Bank* (1938) 278 N.Y. 248, 15 N.E. (2d) 793.

58. See, for example, *Mettryclub Gardens Association v. Council* (Louisiana, 1948) 36 So. (2d) 56; *University Gardens Property Owners Association, Inc. v. University Gardens Corp.* (Sup. Ct. 1948) 88 N.Y. Supp. (2d) 734. See paragraph "sixteenth" of the Forest Hills Restrictions, cited in footnote 16 of chap. i.

. . . In substance, if not in form, there is privity of estate between the plaintiff and the defendant.⁵⁹

States which have followed the lead of New York in adopting a code of civil procedure commonly have a statutory provision that "every action shall be prosecuted in the name of the real party in interest," permitting recognized classes of representatives, such as executors, guardians or "the trustee of an express trust," to sue in their own names. In a suit by the "trustees" under a scheme modelled closely on the Gramercy Park precedents (p. 229), the defendant objected that the "trustees" were not "the real party in interest." The court overruled the objection and permitted the plaintiffs to sue.⁶⁰

One further point might be considered by a public redevelopment agency in framing the enforcement of a scheme of covenants. In most of the private schemes, like Radburn, the community association has been given status (now accepted by the courts) to act as an enforcement body to supplement the powers of individual property-owners. The danger to be avoided has been that of inaction by individuals because of indifference to community interest or because of undue expense. There is another possible danger—of too great initiative by a dissident property-owner, who might sue in his own right to prevent a change desired by the great majority and approved by the community association. This danger would be obviated if the community association were given the sole right of legal action. The way would always be open to property-owners who felt that the community association was not alert to their interests to press for action within the framework of the scheme without independent appeal to the courts.

SCOPE OF ENFORCEMENT

The principle is often stated that equitable remedies "are a matter of grace, not of right." The task of the chancellor is to "balance the equities." In considering whether to grant an injunction, the chancellor

59. (1938) 278 N.Y. 248, 15 N.E. (2d) 793. The draftsman of the *Restatement* nevertheless states, "Since privity is lacking between the Association and the owner, the promise to pay the assessments could not, according to the *Restatement*, be a covenant running with the land so as to subject successive owners to personal liabilities, though the original promise might be effective to create a lien on the land" (personal communication). Conveyance of the parks and common lands by the developer to the association has been held to create adequate "privity of estate." *Kennilwood Owners Association v. Jaybro R. & D. Co.* (Sup. Ct. 1935) 156 N.Y. Misc. 604, 281 N.Y. Supp. 541.

60. *Ogilvie v. Mount* (Supreme Court, Queens County) 87 N.Y. Law Journal 3405 (June 16, 1932): not officially reported. This suit arose in Sunnyside Gardens, a development of City Housing Corporation. It is discussed in Charles S. Ascher, "The Enforcement of Deed Restrictions," 8 *City Planning* 193 (1932). It is curious that in the many such suits brought in "code states" this objection has not been raised more frequently.

will weigh whether the harm done to the defendant is greater than the benefit to accrue to the plaintiff from enforcement. As Judge Clark remarks, this theory has "great disadvantages as a general theory of property law"; for one thing because it induces a "comparison of the value of the interests of plaintiff and defendant and thus effects a preference to large property holders before the law, which has distinct social disadvantages."⁶¹

The same polarity shows itself, however, in many other fields of law, those of nuisances and of zoning—to mention two that concern the use of land. If the court decides to ward off the impact of the police power on the defendant's land, the public action is classed as "arbitrary"; if the court decides to limit the owner's freedom, it will call the ordinance a reasonable exercise of legislative discretion and profess that it cannot substitute the judgment of the court for that of the legislature.

Even when the appeal is to the chancellor's conscience, where the case involves a "promise regarding the use of land," the judge will see the shadow of the legal doctrines expounded on pp. 246 ff.; and he is apt to resort to "touching and concerning the land," or "necessary and convenient," as his touchstones. Content can be given to these general phrases only by specific examples, of which we shall adduce but two.

Duryea bought a plot in Colony Hills, under a set of restrictions imposing architectural control in elaborate detail, even to the "grading plan of the lot." In passing upon plans the trustees of the scheme were empowered to disapprove any which were "not suitable or desirable, in their opinion, for aesthetic or other reasons"; they were to have the right "to take into consideration the suitability . . . of the structure . . . to the site, . . . the harmony thereof with the surroundings and the effect . . . on the outlook from . . . neighboring property."

Duryea proposed to build a \$30,000 house. The trustees approved the plans for the house and the walks, but disapproved a proposed concrete driveway. When Duryea started to build the driveway anyhow, Parsons and his fellow trustees sought an injunction.

The master who conducted the hearing found

. . . that . . . no violent contrast with the landscape effects in the vicinity would result; that it . . . would be the best possible solution of the problem of convenience and utility [for Duryea], but that it would to some extent be a departure from the present degree of openness and informality in the immediate neighborhood. . . .

61. Clark, *Real Covenants*, p. 185. The commonest question in which this "principle" is invoked is whether there have been such "changed conditions in the neighborhood" as to make enforcement of the covenant inequitable. This question is discussed below under "Termination," p. 268.

On these findings, and on evidence that the trustees were acting in good faith, the Massachusetts Supreme Judicial Court ordered Duryea to rip out his concrete driveway.⁶²

Moving across twenty years, from the hills of the Old Colony to the suburban plains of Long Island, we find Solomon, an owner in "University Gardens," who built a doghouse of concrete blocks, 7 feet by 5 feet by 5 feet with a roof, without having submitted plans and specifications showing "the nature, kind, shape, height, material, color scheme and location" of the proposed structure for approval by the property owners' association, as prescribed in the restrictions. The court ordered the doghouse removed, saying:

There is danger in disregarding the violation of such agreements. The first departure from such an agreement is usually . . . minor . . . but by gradual small infringements a substantial impairment or destruction of the whole scheme may gradually result.⁶³

One shudders to think of the impact of Operation Doghouse on University Gardens, the bitterness that must have preceded the litigation, and the resulting emotional tension that will long hamper the neighborliness which the restrictive covenants were presumably to enhance. Wise management will go to great lengths to avoid such dramatic collisions.⁶⁴ The point of the two cases here is to reveal how intensive the scope of enforcement of restrictive covenants can be, under appropriately drawn covenants, and with appropriate mechanisms for supervision.

TERMINATION

Express termination.—Except in a state where a "clearing statute" (p. 258 above) is construed to affect restrictive covenants, we have already seen that there is no legal doctrine prescribing any specified or stated term for covenants (see pp. 255–57).

We are here in a province of economics and city planning rather than of property law. A redevelopment agency might be bold enough to make some limitations perpetual (such as those governing Gramercy Park or Leicester Square); in the same instrument it could set a more limited time upon others. Covenants calling for the maintenance of buildings may well have a life corresponding roughly to the

62. *Parsons v. Duryea* (1927) 261 Mass. 314, 158 N.E. 761. A partner of Olmsted Brothers who was called as witness in the case subsequently expressed his own amazement that the court was willing to go thus far in enforcing the covenants.

63. *University Gardens Property Owners Association, Inc. v. Solomon* (Sup. Ct. 1946) 88 N.Y. Supp. (2d) 789.

64. Charles S. Ascher, "Reflections on the Art of Administering Deed Restrictions," 8 *Journal of Land and Public Utility Economics* 373 (1932).

life of the buildings; when it becomes uneconomic to invest substantial further sums in building renovation, pressures will build up to make the covenants unenforceable in equity. Obviously, there should be grave reflection before imposing perpetual limitations.

If a lifetime is to be set, it should not be too short. It takes years for a redeveloped area to come to maturity. By the time ivy has grown to the eaves and the street trees have an umbrageous spread, a decade or two have whisked by.

Provision should be made in the original agreement for an extension or modification of any or all of the restrictions after the stated term. It is now customary to provide that a majority of the then property owners may give effect to a renewal; otherwise the necessary mutual-ity may be impossible to obtain, not merely because of active dissent, but because by that time there will be absent or undiscoverable owners, or estates, the executors or administrators of which will claim that they have no right to bind the estate in such a matter. Such provisions for extension or modification by less than all the current owners are legally enforceable.⁶⁵

There is wisdom, too, in providing that the issue of renewal, extension, or modification be precipitated some years before the stated terminal date. At Radburn, where the initial period was set at thirty years, the covenants provide that any instrument of modification or termination must be filed at least five years before the terminal date of the covenants (or of any succeeding twenty-year renewal period). If this issue is not settled, owners will hesitate to improve their properties during the last few years; and some of them will strain at the leash to initiate prohibited uses before the deadline.⁶⁶

At Radburn, further, as in some other communities, the initiative is put upon those who wish to extinguish or modify the restrictions at the terminal date. The covenants provide for automatic renewals for twenty-year periods unless documents are filed to the contrary.

Obviously, any obligation can be extinguished at any time by a fresh agreement between those subject to the obligation and those entitled to enforce it;⁶⁷ but in a community scheme it may be hard to get a written agreement from all the necessary parties. For this reason, a device grounded in municipal law rather than property law was introduced at

65. *Restatement*, Vol. V, Sec. 554, Comment e, Illustration 2, p. 3286. *Strauss v. J. C. Nichols Land Co.* (1931) 327 Missouri 205, 37 S.W. (2d) 505.

66. *Forstmann v. Joray Holding Co.* (1926) 244 N.Y. 22, 154 N.E. 652. A covenant restricting to residential use, imposed in 1907, was to expire in 1929. In 1924, the defendant converted his building to business use, in line with a trend in the neighborhood. The court saw no possibility of restoring original conditions by enforcement and was unwilling to force the defendant to let his property lie fallow for five years.

67. *Restatement*, Vol. V, Sec. 557, p. 3293.

Radburn. On many matters of substance ordinarily requiring a signature of each owner acknowledged in form for recording, the Radburn Association is empowered by the restrictions to hold a public hearing on due notice to all persons interested; upon the decision of the governing board of the Association after the hearing, its officers file a certificate with the recording office, reciting that all the steps have been duly taken in accordance with the terms of the covenants. The use of this device has not been questioned in twenty years.

Equitable defenses: loss of enforceability.—As will by now be clear, the effective protection of a community scheme lies usually in the chancellor's conscience—a standard that Sir John Selden long ago bitterly said was as variable as the length of the Chancellor's foot. We have already quoted Judge Clark's complaint about the great disadvantages of this principle "as a general theory of property law." The chancellor applies to appeals for the enforcement of equitable servitudes the same considerations as to any other request for the remedy of specific performance. Because they are such general principles of equity jurisprudence, the *Restatement* traverses them in a few pages.⁶⁸

If the plaintiff is in continuing violation of an obligation under the covenants, he cannot obtain "injunctive relief against substantially like violations of the corresponding promise" (Sec. 560). But the plaintiff's violation, to disable him, must be substantial, not trivial; and continuing at the time relief is sought.

If the plaintiff has acquiesced in other breaches of the promises—whether by the defendant or others in the scheme—he will be denied relief if the acquiescence is such as to prevent "the realization of the benefit sought to be gained" by the attempted enforcement (Sec. 561). The acquiescence must be to a breach continuing at the time of enforcement, not a past breach; and there must be evidence of intention to tolerate the breach.

Failure to seek an injunction with reasonable promptness ("laches") will bar relief: the plaintiff cannot stand back and let the defendant incur expense ("change his position") before interposing his objection (Sec. 562).⁶⁹

The *Restatement* incorporates the basic equitable principle that an injunction will be denied "if the harm done by granting the injunction

68. *Restatement*, Vol. V, Topic C, "Equitable Defenses," Secs. 560–564, pp. 3302–16. Zechariah Chafee, Jr., and Sidney P. Simpson, *Cases on Equity* (Cambridge: The Authors, 1934), include the cases on covenants under "Specific Performance of Contracts: Relief for and against Third Persons," pp. 704–870.

69. A New York court has held that a final injunction will not be granted after trial, even where the suit was begun promptly, if the plaintiff made no move to seek a preliminary, temporary injunction pending trial and the defendant completed the structure pending the trial. *University Gardens Property Owners' Association v. Schultz* (1947) 272 App. Div. 949.

will be disproportionate to the benefit secured thereby" (Sec. 563).⁷⁰

Change of conditions in the neighborhood.—Without doubt, the shibboleth, "changed conditions in the neighborhood," has been the rallying cry for more litigation about restrictive covenants than all the other cases put together, especially during the past thirty years. The principle can be stated simply enough: Injunctive relief will be denied "if conditions have so changed since the making of the promise as to make it impossible longer to secure in a substantial degree the benefits intended to be secured" by its performance (*Restatement*, Sec. 564).

Nevertheless, the issues raised in these many cases do not seem of central concern to a redevelopment agency; and it does not seem useful to rehearse instances in which courts have granted or denied relief in the face of this defense. It is worth noting in passing that the defense is frequently overruled; it is not an open sesame to the termination of restrictions that stand in the way of more profitable use of land by the defendant. It makes a difference, too, whether the change beats against the dike of the restrictions from outside the area of the scheme, or whether it has begun insidiously to undermine the scheme from within. If the latter, then it will often be possible to defeat the plaintiff by evidence of his own violation, his acquiescence in the other breaches, his negligent delay, waiver, or estoppel.

The spate of litigation in the name of changed neighborhood conditions has accompanied the great unplanned growth of American cities since the turn of the century. Areas dedicated by their developers to quiet residence have been engulfed by urban sprawl; their streets have become links in major traffic arteries, with filling stations, taverns, mortuaries, and neon signs; they are oases of single-family dwellings ringed by a desert of apartment houses.

The basic assumption for a redevelopment agency's community scheme is set by the enabling acts and the statute authorizing federal aid: the project must be part of a comprehensive community plan. Granted that no group of officials can be all-wise for the future, redevelopment will have failed signally if within twenty to thirty years similar unforeseen pressures threaten its projects—whether central slum clearance or predominantly on open land.

One may assume, therefore, that community schemes sponsored by redevelopment agencies will tend to come to a deliberate, planned end; and that claims of changed conditions in the neighborhood should be

70. But note that under the principles underlying cases like *Van Sant v. Rose* (1913) 260 Ill. 401, 103 N.E. 194, it is not necessary for the plaintiff to show that he will be damaged by the breach: "the mere breach is sufficient ground for interference by injunction."

rare. Indeed, it is to be hoped that redevelopment projects will be large enough to create their own neighborhood atmosphere, well cushioned against disruptive external shocks.

On the other hand, it will be only the exercise of prudent foresight for a redevelopment agency to draft a scheme of covenants to withstand attack against later claims that circumstances in the surrounding neighborhood should render continuance of the restrictions ineffective. The agency may promote a project hoping that the new use of the area will bring about an improved use of the surrounding area by private means alone. The agency may find itself unable to raise the funds to carry its program through or private developers may not be attracted to the surrounding area. Attempts might then be made to break down restrictions imposed upon the first project on the ground that the rest of the area was being used in ways inconsistent with those imposed upon the restricted project. (Truly, this would be an instance in which the neighborhood had failed to change, but the legal argument would be the same.) To guard against this possibility, the agency might make clear in its covenants that one of the purposes of the covenants was to make the redeveloped area different from the surrounding area. If this intent of the parties were made clear, there is no rule of law that would prevent it from having some legal effect, whether or not a chancellor saw fit to give injunctive relief.

EXTINGUISHMENT OF RESTRICTIONS BY PUBLIC ACTION

The redevelopment agency has a double interest in the ways in which restrictive covenants may be extinguished by action of a public authority. Like any other developer, it will wish to assure that community schemes in projects that it sponsors are safeguarded against untoward impact of the taxing power, eminent domain, or the police power. On the other hand, as we have pointed out on page 226, the Administrator of the Housing and Home Finance Agency has announced that

. . . every contract for financial assistance under Title I [of the Housing Act of 1949] will require that the local public agency . . . shall cause to be removed or abrogated any covenant or other provision in any . . . lease, conveyance or other instrument restricting upon the basis of race, creed or color, the sale, lease or occupancy of any land which it acquires as part of a project. . . .⁷¹

71. HHFA, *A Guide to Slum Clearance and Urban Redevelopment under Title I of the Housing Act of 1949*, revised July, 1950, p. 24.

He suggests that condemnation may be necessary to remove restrictive covenants.⁷²

CONDEMNATION OR EMINENT DOMAIN

The *Restatement* offers the proposition that as an interest in land the obligation of a promise respecting the use of land is extinguished by eminent domain "to the extent to which the taking permits a use inconsistent with" the continued performance of the promise.⁷³ The illustration given is of condemnation of lots subject to residential restriction to be used as the site of a fire station: "the condemnation will extinguish the interests in land created by" the promises. This proposition suggests that special care must be taken in the condemnation of residentially restricted land which is to be redeveloped for residential use: the extinguishment should be expressly stated as one of the purposes of condemnation; and the interests resulting from the covenants should be expressly included in the interests to be condemned. This will be important to abrogate not only racial covenants, but inept and unco-ordinated restrictions on "dead land" (see pp. 239-40).

The reported cases do not provide many useful precedents on the effect of condemnation on restrictions. Judge Clark notes that there is a conflict of views whether such restrictions "are property" for purposes of condemnation; but the major concern of the judges and the commentators has been the measure of damages or compensation to be awarded to the beneficiaries of the promises.⁷⁴

Here again, unfortunately, a redevelopment agency cannot dismiss the issue lightly as mere disputation among legal scholars. In Connecticut, a town that wanted to build a school house partly on restricted land found itself paying \$10,000 to a woman who owned a house across the street from the site of the proposed school.⁷⁵ The state of Michigan, in condemning land for a right of way, was called upon to pay, in addition to the award for the land in the right of way, over one quarter of a million dollars to the owners of 129 lots outside the right of way but within a restricted subdivision through which it ran.⁷⁶ Not all courts follow this doctrine; but a redevelopment agency seeking to condemn in order to abrogate covenants must be careful to include among the parties to the action all persons who might claim a

72. *Ibid.*, p. 23.

73. *Restatement*, Vol. V, Sec. 565 (1), p. 3316. The *Restatement* reminds us in Sec. 565 (2) that under its doctrine a promise constitutes an interest in land only so far as it creates an obligation binding on the successors of the promisor.

74. Clark, *Real Covenants*, p. 178, footnote 34.

75. *Stamford v. Vuono* (1928) 108 Conn. 339, 143 Atl. 245.

76. *Petition of Dillman* (1933) 263 Mich. 542, 24 N.W. (2d) 894.

beneficial interest in the covenants, whether or not they are owners of the land that the agency seeks to reach.

TAX SALE

Although there is a division of authority, the majority of cases hold that the sale for taxes of land . . . subject to an easement or servitude or a restrictive covenant . . . does not have the effect of extinguishing the easement, servitude or covenant.⁷⁷

The *Restatement* offers a more limited rule: that interests arising out of "a promise that land . . . will be used in a certain way" are not extinguished by a tax sale, leaving open the question whether "a promise to pay for a benefit received in the use of the land" is to be deemed extinguished.⁷⁸ A distinction is possible between claims accrued for past due unpaid assessments or charges—to which the claims for taxes might well be superior—and the continued obligation of the purchaser of a tax deed for future assessments under the restrictions. We face here again some metaphysics: Is the price paid at the tax sale calculated to include the cost of future charges? The terms of tax sales and the records of tax foreclosures are usually silent; one can speculate and resort to presumptions as to intent. Obviously, all these considerations apply only in states where a sale upon foreclosure of unpaid taxes purports to convey a fee title instead of a lien.

THE POLICE POWER: ZONING

The constitutional prescription that no state shall pass a law impairing the obligation of contracts should govern attempts to modify or extinguish private restrictions on the use of land by the police power through zoning or other ordinances. In fact, courts have fairly generally said that zoning an area for more inclusive uses, such as business, has no effect upon more limiting private restrictions; indeed, the counterproposition is seldom advanced, perhaps because many zoning ordinances expressly provide that they do not purport to modify private covenants.⁷⁹

77. Note: "Easement or Servitude or Restrictive Covenant as Affected by a Sale for Taxes," 168 *American Law Reports* 529 (1947). Cases are cited in support of the majority view from Missouri, Montana, New Hampshire, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Utah, and Wisconsin. Contrary holdings are cited from Florida, Iowa, Kansas, Mississippi, Washington, and Canada.

78. *Restatement*, Vol. V, Sec. 567, pp. 3321-24.

79. "The Effect of Zoning on Private Restrictions," 1 *Zoning Digest* 137 (December, 1949). An extensive discussion of the relationship between zoning and restrictions and a comparison of their virtues for the control of urban land use by Dean M. T. Van Hecke is still of value: "Zoning Ordinances and Restrictions in Deeds," 37 *Yale Law Journal* 407 (1927-28). See also a more recent note: "Abrogation of Private Restrictive Covenants by Zoning Regulations," 48 *Michigan Law Review*, 103 (1950). This problem is discussed

Courts differ in their readiness to admit testimony of a change of zoning as evidence of a change of conditions in the neighborhood in a suit for injunction to enforce private restrictions. By the same token, the court has denied the ingenious attempt of a municipality to rely on a violation of private restrictions in criminal action ostensibly in enforcement of a zoning ordinance.⁸⁰

During the war, because of the acute housing shortage, the City of Detroit passed an emergency ordinance permitting the use as rooming houses of dwellings in zoning districts normally limited to single-family residence, terminable upon the end of war emergency. This ordinance was held not to bar an injunction under private restrictions against rooming houses.⁸¹

USE OF COVENANTS BY A PUBLIC BODY NOT UNDER A COMMUNITY SCHEME

Public bodies in the sale of publicly owned land may insert covenants in the contract with the purchaser defining the types of buildings he is to erect, the maximum prices at which he is to sell them, the time within which he is to commence building, the site plan that he is to adopt. The sales price of the land may well be influenced by these limitations. The municipality may reinforce these limitations by zoning, so far as possible (use districting, etc.).⁸²

Several instances have arisen in New Jersey, in the wake of postwar expansion of home building, where the municipality and the developer have misguessed the veterans' housing market, to meet which the city had turned its land over for development. The cost of single-family houses, for example, has proved excessive and the municipality and the developer have both been ready to turn to garden apartments. The city council has modified the zoning ordinance accordingly and has adopted a resolution (after public hearing and sometimes extended debate) modifying the covenants in the deed to the developer. The New Jersey statute authorizes the municipality ". . . to waive, release or modify

further on pp. 275-77. Conversely, see *City of Richlawn v. McMakin* (Ky. Ct. of App. 1950) 230 S.W. (2d) 902, holding that a deed restriction permitting commercial use creates no vested right against a subsequent zoning ordinance limiting the property to residential use. 2 *Zoning Digest* 149 (Oct., 1950).

80. *People on complaint of Wolff, Building Commissioner v. Margolies* (County Court, New York, 1937) 166 Misc. 135, 1 N.Y. Supp. (2d) 969.

81. *Indian Village Association v. Barton* (1945) 312 Mich. 541, 20 N.W. (2d) 304

82. Municipalities in New Jersey, upon the public or private sale of land, are expressly empowered by statute "to impose any restrictions on the use to be made of such land" and conditions such as those mentioned in the text "or any other conditions of sale in the manner and to the same extent as any other vendor of real estate, provided, however, that the restrictions on the use . . . and the conditions of sale shall be set forth at length" in the required advertisement of sale. N.J. Rev. Stat. 40:60-26.

any covenants, conditions or limitations . . . imposed . . . in conveyances, provided that the power . . . shall not be exercised to impair any vested or contractual rights of third parties.⁸³

In several recent cases, these modifications have been made after the developer has built and sold some of the more restricted type of homes, before discovering or persuading the city council that he could not profitably continue on this course. Purchasers have sought to invalidate the city's action of modification. The courts have found no evidence of intention to create a community scheme in these transactions. In a case that apparently climaxed months of public discussion about the future of skyscraper apartments in Ivy Hill Park in Newark, the court said:

It is perfectly clear that the covenant was purely personal between the immediate parties and that it was exacted by the City . . . for its own sole benefit. . . . The City authorities at that time wanted the entire 52 acres to be developed with the type of structure approved by them and exacted from the purchaser an agreement so to build. . . . The City procured the covenant for its own protection and benefit.⁸⁴

Redevelopment agencies may want to use covenants in similar fashion to define the obligations of purchasers of land in a project. They and their attorneys should be clear in their minds whether or not they intend to create a community scheme with promises that will run for the benefit of successive owners. If not, they should word their covenants as clearly as possible to avoid claims such as those made by the home buyers in the New Jersey cases.

Indeed, it is suggested that contracts between redevelopment agencies and builders may in appropriate circumstances call for the use of conditions, rather than covenants. Where, as in Hackensack or Newark, the purpose of the public authority is to bring the land into use for housing as soon as possible and to avoid the holding of land for speculative purposes by the purchaser, the contract and deed might well provide that the failure of the purchaser to commence (or complete) the contemplated redevelopment by a stated date might vest in the public authority a right of re-entry for breach of a condition. The estate of the purchaser would then be at an end and the public authority could proceed expeditiously to negotiate other uses for the

83. New Jersey Rev. Stat. Sec. 40:60-51.2. (L. 1943, c. 33, amended L. 1946, c. 140.)

84. *Hendlin v. Fairmount Const. Co.* (1950) 8 N.J. Super. 310, 72 A. (2d) 541, at p. 554; following *Taylor v. Hackensack* (N.J. 1948) 58 A. (2d) 788. But see *Ingannamori v. Hackensack* (1946) 134 N.J.L. 103, 45 A. (2d) 896, where the court found that a release of restrictions under this section impaired the rights of an unsuccessful competitive bidder who had built on land across the street previously bought from the city under the same restrictions. One is reluctant to believe that the distinction is between a home-builder and a home-buyer.

land, instead of finding itself involved in the cumbersome process of enforcing a covenant concerning land still owned by the delinquent purchaser.

EFFECT OF STATUTORY PROVISIONS

Chapter ii of this monograph has constituted a brief review of doctrines of common law and equity. In plotting his way among these shoals, the officer of a redevelopment agency must now watch equally carefully for artificial aids to navigation supplied by legislatures in recent years in their eagerness to divert or channel the social controls of urban land.

For example, the Civil Code of California provides that "Every covenant contained in a grant of estate in real property which is made for the direct benefit of the property, or some part of it then in existence, runs with the land" (Sec. 1462). Some California courts have read this paragraph to carry the negative implication that a covenant which imposes a burden, charge, or obligation upon the land or the interest of the owner does not run with the land, since it is not made for the direct benefit of the land.⁸⁵ Another section of the Civil Code provides that the "covenant binds those only who acquire the whole estate of the covenantor in some part of the property."

A layman should not draw the conclusion that restrictions not conforming to these statutory prescriptions are outlawed in California or cannot be made to bind successors in interest. The possibility still remains of enforcing them as equitable servitudes (see pp. 253-55). The conclusion is that special care must be used in California in drafting restrictions to see whether they do or do not fall within the provision of the code and to rely upon the appropriate remedies. Apparently, there must be a clear expression in the deed of the purpose to create a community scheme to lay the basis for the court's enforcement of the restriction as an equitable servitude.

Coming more directly to statutes governing redevelopment agencies, we find that state legislatures have expressly conferred upon slum clearance or redevelopment agencies authority to make obligations imposed by them on redevelopers covenants running with the land. For example, the Georgia Redevelopment Law provides, "Any such obligations by the purchaser shall be covenants and conditions running with the land where the authority so stipulates."⁸⁶ Such a statute may re-

85. *Marva v. Aetna Construction Company* (1940) 15 Cal. (2d) 375, 101 P. (2d) 490; *Los Angeles Terminal Land Company v. Muir* (1902) 136 Cal. 36, 68 Pac. 308.

86. Georgia Code Annotated, 99-1201 a., Sec. 7.

quire re-examination of the accepted body of judicial doctrine in the state.

Again, many redevelopment statutes specifically provide that redevelopment companies cannot convey the property to other persons without the consent of a public agency. Common-law rules against restraints on alienation or against perpetuities, discussed at pages 255–257, should supposedly give way before such an explicit enactment; they must certainly be re-examined in its light.

Also, in the relationship between the exercise of the police power through zoning and private covenants, some legislatures have intervened by statutory expressions that modify conclusions based upon general legal doctrine. For example, a Georgia statute has provided that covenants restricting land should not run for more than twenty years in municipalities that have adopted zoning ordinances.⁸⁷

These various legislative interventions have undoubtedly been inspired by the desire to clarify, to cut out underbrush. Yet the lawyer will recognize the fresh problems that they can create: a court can still encapsulate them as mere restatements of general legal doctrine; it can interpret them so as to minimize their impact on the corpus of the law; or it can accept them as a new departure. In any event, the advisers to the redevelopment agency, in considering the use of contract devices, must examine not only the specific enabling legislation, but other more remote parts of the statute law of the state.

CONCLUSION

The object of the foregoing synopsis of the legal bases of covenants has been to enable redevelopment agencies and attorneys who have not often drafted community schemes to obtain a general understanding of the possibilities and limitations of private restrictions as a tool in redevelopment. It may help them to put the decisions of the courts of their state into their setting in a general body of doctrine. It may help to avoid pitfalls by the too easy use of stock phrases such as "running with the land," "privity," "changed conditions," "the Rule against Perpetuities."

87. See *Smith v. Pindar Real Estate Co.* (1938) 187 Ga. 229, 200 S.E. 131. Similarly, the Zoning Enabling Act of South Dakota somewhat gratuitously authorizes property owners to adopt protective covenants regulating the height, size, location, and use of buildings, land coverage, and population density, and then provides: "The authority hereby granted, and any declaration or contract made thereunder, shall be subject to the right of the city to exercise the powers and authorities conferred under the previous sections [of this Act] at any time the city may elect to exercise such power." South Dakota, Code of 1939, Sec. 45.2611.

A new generation of legal commentators bemoans the inadequacy of outmoded concepts as a legal framework for the effective control of urban land use. But, as in so many fields of law, the changes that judges can make are minor. In Justice Holmes's words, their power is "molecular, not molar." Here is the framework, built up in the course of eight hundred years; the task is to understand it and to put it to the best possible use for our purposes. Sufficient examples have been given of the thwarting of the obvious intent of the parties by draftsmanship that disregarded one or another of the relevant doctrines of property law.

It is at least well established that a community association can enforce a scheme of restrictions against all owners (and tenants) in a community scheme. Under one or another doctrine (which may vary from state to state) it can collect charges or assessments to a community fund, if the documents are properly drawn. It may compel conformity to a meticulous scheme of control of use and of aesthetics. It may provide services beyond those furnished generally by the municipality. Under properly drawn documents, the restrictions may be extended or modified, even against the expressed desires of a substantial minority of owners affected.

Enforcement of private restrictions is not quick and it is not cheap. No lawsuit is quick or cheap; no attorney can ever assure his client of success, however black on white the violation of the written covenant may seem. After all, the appeal is generally to the conscience of the chancellor, who will "balance the equities." In a test case under one community scheme, forced upon the community by deliberate, intentional violation, flaunted publicly by a disgruntled owner as spokesman for a dissident minority, the pleadings covered nineteen foolscap pages. Twenty witnesses were called in a three-day trial; forty-five maps, photographs, and documents were put in evidence. The case came to trial nine months after the act of violation; the judge took five weeks to hand down his decision of one sentence: "Judgment for the plaintiffs." Judgment was finally entered only after a lapse of nearly a year.⁸⁸

In this case the community trustees had removed the offending structure—a barricade blocking a walk constituting a common easement—within an hour; but they ran some legal risk in such self-help, despite an explicit statement in the restrictions authorizing entry to abate a violation.⁸⁹ If the structure had been substantial instead of

88. Charles S. Ascher, "The Enforcement of Deed Restrictions," 8 *City Planning*, 193 (1932).

89. On the right of summary abatement (and its limits) in an analogous instance, that of a private nuisance, see any hornbook, such as William L. Prosser, *Handbook of the Law of Torts* (St. Paul: West Publishing Co., 1941), Sec. 74, pp. 591-93.

symbolic, this course would have been impractical. To obtain a preliminary injunction requiring its removal pending trial, someone would have had to put up a bond to secure the defendant against damage if the permanent injunction were denied after trial. Community associations may not have such resources.

By contrast, the enforcement of the police power seems simple: an information or a summons; a hearing before a magistrate within weeks, not months; and the sanction of a fine or even a jail sentence; with the weight of government, not a group of private owners or their community organization, behind it.

Nevertheless, the words of a legal commentator written several decades ago are still basically valid and encouraging

When it is considered that for years the common method of developing a tract of land has been by the adoption of a general . . . scheme . . . and the imposition of uniform restrictions . . . , the fact that so few cases comparatively have been before the courts shows how beneficial they have been considered, how little friction they have caused and how well disposed most property holders are to observe their solemn undertakings.⁹⁰

It may now be of interest to tell the story of one community in which a scheme of "Protective Restrictions and Community Administration" has served for over twenty years as the foundation for a rich and fruitful community life, and has maintained harmony and amenity; to recount its vicissitudes and how it has surmounted them. This is the story of Radburn, New Jersey.

90. W.A.E., Annotation: "Who May Enforce Restrictive Covenant . . . ," 21 *American Law Reports* 1281 (1922) at p. 1320.

CHAPTER III

GOVERNMENT BY CONTRACT IN RADBURN, NEW JERSEY

A COMPREHENSIVE survey of planned communities in the United States, published by the National Resources Committee in 1939, covered one hundred and forty-four examples, of which twenty-nine were described in some detail. The report distinguishes communities developed by industry, by governmental agencies, by real estate agencies, and by philanthropic agencies. It covers both self-contained communities and residential communities; some suburban, some within central cities. It outlines the physical plan of each community with photographs and maps; physical provisions for social activities; and community government and the use of legal restrictions, with occasional quotations of noteworthy paragraphs from deed restrictions.¹

Radburn, New Jersey, is one of the communities included in the survey. It is not the oldest nor the largest. Its deed restrictions are not the most elaborate.² Like many other planned communities, it has not fully realized the intentions of its planners.

Nevertheless, Radburn is selected as a case study for several reasons. Its novel physical plan made the maintenance of community facilities central and integral. Its scheme of covenants was prepared after unusually careful study and has proved itself in twenty years of operation to serve the community well with only two minor amendments. There is available an adequate record of two decades of admin-

1. Arthur C. Comey and Max S. Wehrly, "Planned Communities," in *Urban Planning and Land Policies*: Vol. II of *Supplementary Report of the Urbanism Committee to the National Resources Committee* (Washington: Government Printing Office, 1939), pp. 1-161.

2. Note the comments of Olmsted Brothers upon the scheme of covenants prepared by Charles H. Cheney for Palos Verdes, California: "In our opinion it is fairly open to the criticism of overelaborateness, inclusiveness and complexity of legal mechanism, through trying to cover in detail in advance all sorts of contingencies likely to arise in a project of great size and variety. At many points we should have preferred broader, simpler and more elastic provisions, frankly incomplete as to many details, and frankly relying upon intelligent and fair-minded interpretation of broadly expressed general intentions." "Restrictions for Residential Subdivisions and Related Matters: A General Report by Olmsted Brothers," January, 1925. A mimeographed copy is in the Library of the Harvard Graduate School of Design.

istration. And finally, its problems were in many respects analogous to those that will confront redevelopment agencies.

THE SETTING OF THE RADBURN RESTRICTIONS

Radburn's novel contributions to town planning and site planning, as the first "town for the motor age," have had international influence and have been described elsewhere.³ It is not necessary to explain them in detail here. It will, however, help the reader to appreciate the unusually important role of the community association to understand why certain community facilities were more integral to the plan than the occasional parks or open spaces in many developments, which could be allowed to become a "problem of maintenance" or to fall into disuse without great detriment to the community.⁴

The central features of Radburn's physical plan for our purposes are:

a) The super-block, of 30 to 50 acres, with main traffic arteries on the perimeter spaced 1,200 to 1,800 feet apart, instead of the conventional checkerboard with streets at 200 to 400 feet. The core of each superblock is a park of six to eight acres, accessible only by footpaths. Landscaped largely for "passive" use (in the jargon of the recreation expert), the park also contains important facilities for active recreation, such as a swimming pool and a "tot-lot," a supervised playground for preschool children.

b) Separation of automobiles and pedestrians, with a system of walks and paths routed at different places from roads, and separated where they cross by underpasses or overpasses.

c) Houses turned around, so that living- and sleeping-rooms face toward gardens and parks with footpaths, and service rooms face toward paved access service roads.

d) Dead-end roads, giving off peripheral traffic arteries into the superblock, serving groups of twelve to sixteen houses as access for residents, visitors, and tradesmen, but screening out through traffic.⁵

The maintenance of these integral parks, recreation facilities, and footpaths was fundamental to the existence of Radburn. There was at the time no possibility that the existing municipal government would

3. See references in footnote 19, p. 233, chap. i.

4. "It may be noted that the private parks have fared no better here [at Roland Park] than at Forest Hills Gardens. Most of them have been abandoned, but about three still remain in existence, largely due to the interest in upkeep of some one person in the block." Comey and Wehrly, *op. cit.*, p. 91; see also p. 106.

5. As recently as 1949 the Radburn site plan has been urged on the commercial real estate developer as "food for thought." Stanley L. McMichael, *Real Estate Subdivisions* (New York: Prentice-Hall Inc., 1949), chap. 24, "Subdividing for the Motor Age," pp. 218-28.

accept responsibility for them. The Radburn town site constituted about one-fifth in area of an incorporated Borough of Fair Lawn, largely agricultural with intensive truck farming, with sporadic colonies of modest homes of workers from the nearby industrial centers of Paterson and Passaic. Only the main county roads had even rural street lighting. The borough contracted with a hog farmer for a weekly collection of garbage. With all the open farm land available, the educational authorities had not thought school playgrounds necessary. The borough was just initiating a public water supply when Radburn was started. Snow removal from streets or walks was not within the purview of the municipal budget.

If, by force of any persuasion, the borough had accepted responsibility for the Radburn facilities, so that their maintenance could be covered into the home-owners' taxes, they must inevitably have been opened to the general public, a load of service that they were not designed to support. Serving only part of the citizens of Fair Lawn, they could not fairly be maintained out of general taxes. A special district might have been set up within the borough, with a special tax, a set of district commissioners and attachés. This device is used in suburban counties with a scattering of separate unincorporated hamlets, but it produces only confusion in local government.

One of Radburn's chief planners, in retrospect, believes that Radburn should have been incorporated as a separate municipality.⁶ This proposal was considered and dismissed at the time by the City Housing Corporation's lawyers and municipal advisers. Under the general municipal law of New Jersey, no borough could be created except by special act of the legislature and the portents at the time were not favorable for the passage of such an act, partly because a general revision of the Municipalities Act was then in contemplation. Moreover, incorporation at the beginning would have involved putting control into the hands either of long-resident farmers or newly arrived home-buyers, neither of whom would necessarily understand or be in sympathy with the planners' purposes. Separate incorporation at later stages never commanded community support.

These considerations are set forth here in some detail, because with modifications not too difficult to spell out, they will confront redevelopment authorities even in projects that are well within a central city. If leaseholds are not to be the chief means of control (see page 242), redevelopment agencies may want to consider "government by contract" as an answer to the question: How can a neighborhood within

6. Clarence S. Stein, *Toward New Towns for America* (Chicago: Public Administration Service, 1951), p. 68.

a municipality "carry on a more advanced form of living than the municipality as a whole is ready to afford?"⁷

THE FRAMEWORK OF THE RADBURN RESTRICTIONS

The City Housing Corporation deemed it important to create the scheme of "Protective Restrictions and Community Administration" before the first conveyance of a home to a purchaser.⁸ It wanted to convey the parks, swimming pools, and footpaths to an independent entity as assurance of their permanence to the prospective home-buyers. There have been too many developments initially ornamented by parks, tennis courts, and golf links which the developer found it profitable later to transform into shopping centers or building lots—leaving the home-buyers helpless since the land belonged to the developer.⁹ Furthermore, the Corporation wanted to have a functioning community administration from the beginning. The Certificate of Incorporation of the Radburn Association, as an association not for pecuniary profit, was filed on March 19, 1929; "Declaration of Restrictions No. 1, Affecting Radburn, Property of City Housing Corporation," dated March 15, 1929, was recorded with the county clerk on April 8, 1929; the members and trustees named in the Certificate of Incorporation of the Association met on April 2, 1929, and adopted its by-laws and other basic regulations; the first family moved into Radburn on April 25, 1929.¹⁰

It was therefore possible in the first deed to a house to "incorporate by reference" the fairly elaborate "Declaration of Restrictions No. 1." The legal formula was simply to provide that the purchaser by his acceptance of the deed, agreed for himself, his heirs, and assigns, that his plot was subject to the provisions of that instrument. The Declaration and the charter and by-laws of the Association were printed in a pamphlet, with a six-page Foreword that undertook to explain in layman's language the purport of the documents; a copy of this "Green

7. Charles S. Ascher, "The Extra-Municipal Administration of Radburn," 18 *National Municipal Review* 442 (1929).

8. Note that no vacant land was to be sold as home sites. The Corporation built all the houses until its capital was exhausted in the depression. As a result, the houses were placed in groupings that assured the best relationships for light and view and the lots were then cut into shapes to fit the houses. The design was not cramped by having to fit the houses into standardized lots. Free use was made of easements for walks and utilities.

9. An amusing example is cited in chap. i, pp. 230–31. There are notable examples within New York City, such as Jackson Heights, promoted originally as a "co-operative."

10. The first deed of conveyance of park lands to the Association was recorded on January 4, 1930. The Corporation waited until the end of the building season and until the landscaping had been installed at its expense, so that the park could be turned over to the Association fully equipped and ready for routine maintenance.

Book," as it is familiarly known in Radburn, was furnished to each prospective buyer. Indeed, in the contract of purchase, he acknowledged receipt of a copy.¹¹

A COMBINATION OF MUNICIPAL LAW AND PROPERTY LAW

Covenants, equitable servitudes, easements, liens, promises with respect to the use of land—the concepts of property law expounded in chapter ii—were the foundation of Radburn's "Protective Restrictions and Community Administration." But under the guiding influence of the City Housing Corporation's advisers, administrative devices accepted in municipal law were ingeniously adapted. These advisers included Louis Brownlow, former president of the International City Managers' Association, the Corporation's resident municipal consultant at Radburn; Major John O. Walker, the first manager of the Radburn Association, who arrived early enough to help shape the administrative pattern in the light of his seven years' experience in municipal government; Laurence A. Tanzer, Esq., of New York, expert in charter drafting; and the late Spaulding Frazer, Esq., former corporation counsel of Newark, and attorney for the New Jersey League of Municipalities.

As the "Green Book" explained to home-buyers,

Since the Radburn Association is undertaking activities so much like those of a municipality, the Association has been organized on the model of the best modern practice in municipal government, and the scheme of organization provides for a President and Trustees (corresponding to a Mayor and Council) who are responsible for determining the policies of the Association; and the actual administration is placed by the By-Laws in the hands of a Manager (corresponding to a City Manager), who is to be chosen by the Trustees solely on the basis of his executive and administrative qualifications, and who is responsible for the carrying out of the policies of the Trustees.

Residents will accordingly take up all matters . . . in the first instance with the Manager.¹²

Specifically, residents were advised to approach the manager about applications for the approval of designs for structures and alterations, about the payment of charges, the management of the parks and recreation facilities, and for certificates, approvals, and other documents. All records of the Association available to the residents were to be filed in the manager's office.

11. The text of the Declaration of Restrictions No. 1, reissued in 1950 with all amendments to date, can be obtained from the Manager, The Radburn Association, Fair Lawn, N.J., for 50 cents. The original pamphlet, with its Foreword, was entitled, *Radburn, Protective Restrictions and Community Administration* (New York: City Housing Corporation, 1929).

12. *Ibid.*, p. 3.

In accordance with this expressed pattern of relationship, the trustees at their initial meetings adopted elements of an administrative code, one chapter governing the administration of the architectural control, another the budgetary and financial practices. These will be discussed in more detail presently, but their objective is worth stressing: to prescribe standards that would define clearly the areas of the manager's discretion and the decisions reserved to the board. Furthermore, in consultation with its architectural advisers, the board sought to promulgate affirmative suggestions for the solution of problems that home-owners could be expected to bring to the Association. If the owner would accept a standard solution, the manager could give him immediate, formal approval. If the owner preferred a solution of his own, it would have to go before the board or its architectural committee for special approval.

Another device adapted from municipal practice has already been mentioned briefly in chapter ii (p. 266). Where, under property law, the signed and acknowledged agreements of all or a majority of property owners would be required to place on record an action affecting property rights, the Radburn instruments provide instead for due notice to all owners affected, by mail or by advertisement, of a public hearing on the issue, by the trustees; for decision by vote of the trustees after the hearing; and for the recording of a certificate signed merely by the officers, in the form and manner specified in the instruments.

This familiar practice greatly facilitated the introduction of unprecedented flexibility in adjusting the annual charge or assessment. In most real estate subdivisions the restrictions obligate the home-owner to pay a fixed annual charge, usually expressed in mills per square foot of lot area. The pioneer Forest Hills restrictions set a charge of two mills per annum, beginning January 1, 1913. Within a few years World War I so decreased the purchasing power of the dollar that the assessment had to be doubled to cover the cost of the essential services. It then became necessary to undertake a community campaign of door-bell ringing to persuade each owner to sign an instrument of modification. Some refused; others who were nonresident owners of vacant lots failed to respond at all.¹³ In other subdivisions, the restrictions give the community association limited discretion to vary the charge within a stated maximum.

At Radburn, the trustees were empowered to adopt an annual budget presented by the manager after an advertised public hearing,

13. For a vivid practical example of the cost of modifying restrictions by unanimous action when owners realize the nuisance value of withholding their consents, see Stanley L. McMichael, *op. cit.*, pp. 192-93.

and to fix a charge much as a city council fixes a tax rate. In apportioning the total appropriation among the property-owners, the trustees were to use the assessed valuations set by the borough tax assessor. The only ceiling on the rate of charge was that it should not exceed one-half of the rate of tax levied for all state, county, school and other local public purposes in the preceding year.¹⁴

This limitation was not casual. Some ceiling was deemed necessary to assure prospective purchasers that they were not subjecting themselves to unlimited exactions by a private association. Those who framed the scheme expected that some of the services maintained in the initial years by the Association would be taken over by the municipality as the general level of public services rose in the wake of wider suburbanization of the rural parts of the borough. The Association's revenues would thus be freed for the provision of more advanced services desired by the Radburn community. How these expectations were realized forms one of the more interesting chapters in the story of Radburn (see pp. 295 ff.).

FACTORS IN RADBURN'S HISTORY AFFECTING THE COMMUNITY SCHEME

Before we present detailed aspects of the administration of the community scheme over twenty years, a few facts should be provided as general background to aid in interpreting specific episodes.

Radburn was planned as a community of about 25,000, many of whom would work within the town, although perhaps half would commute from the large cities of northern New Jersey and from New York City. The original site plan contained an industrial area served by a spur from the Erie Railroad and areas for low-cost homes. By the standards of the planners, this community would have constituted three natural neighborhoods, each including the patrons of an elementary school. A single high school would have served the three neighborhoods without forcing an adolescent to travel too far. As the site for this town, the City Housing Corporation assembled nearly two square miles of farm land.

The first inhabitants were necessarily all commuters; they were a self-selected group largely of young married couples with small children, eager to find outlets in the social activity which the physical plan and the well-organized community association fostered.¹⁵ One of

14. Radburn Protective Restrictions and Community Administration, ("Green Book"). Art. Five, Sec. 1, p. 13.

15. This aspect of Radburn has received as widespread attention as its novel site plan and will not be described in detail in this report. See Robert H. Hudson, *Radburn: A Plan of Living* (New York: The American Association for Adult Education, 1934);

the large life-insurance companies purchased the first mortgages on the three hundred or so houses built and sold before the full impact of the depression brought further building to a grinding halt. The Corporation's capital was exhausted, partly by the carrying charges on the large holdings of undeveloped land, bought at prices averaging \$2,000 per acre. The farms reverted to their owners and were not absorbed for suburban development until after World War II. Many of the homeowners, white-collar and professional men, lost their homes; at the bottom of the depression, the life-insurance company took over about one hundred and twenty houses as "mortgagee-in-possession" and rented them to tenants. With the later housing shortage and the return of prosperity, these were all sold again to new residents.

Radburn continues to enjoy an active community life, as this story will reveal. On the occasion of its twentieth anniversary in 1950, the Radburn Association reported that of 200 families belonging to the Citizens Association in 1930, 44 still lived in Radburn. But it is a truncated community. The Association collected charges from 655 families in April, 1950 (of whom about 90 were tenants in two apartment buildings). This curtailment has had two noticeable effects for our purposes. First, the Association has an overhead administrative establishment that with comparatively slight enlargement could serve 25,000, but that consumes one-fifth to one-fourth of the Association's budget. Secondly, the community, during most of its life, has been hampered in planning ahead by uncertainty about the development of the surrounding farm lands. The present population absorbs the existing facilities of play-space and swimming pools completely. For years it lived in hopes that the adjoining lands would be developed in the Radburn pattern, so that new neighbors could be invited into the scheme from areas equipped with their own swimming pools and tot-lots. Only in the last two or three years has it become evident that Radburn is to be encircled by modest ranch-type houses built on conventional streets by developers who have no interest in providing community facilities comparable to those in Radburn, or by FHA-insured garden apartments whose sponsors would not subject them to the assessments of the Radburn scheme. And there are no capital resources to extend the Association's facilities.

The method of selecting the trustees is discussed in detail below (see p. 304). The problem was to insure representation of the developers and planners in the early days, before a heterogeneous collection of home-purchasers had crystallized into a community, and then to

Charles S. Ascher, "The Suburb," in Leon Carnovsky, ed., *The Library in the Community*. (Chicago: University of Chicago Press, 1944); James Dahir, *Communities for Better Living* (New York: Harper & Bros., 1950), pp. 185-90.

devolve control upon them. It should be borne in mind that the first board included no home-owner, that the first home-owner became a member of the board in 1931, and that the majority of the board were not home-owners until the fall of 1938, nearly ten years after its organization. In 1950 no trustee could be said to be a spokesman for the Corporation.

Again, the succession of managers in Radburn followed the pattern of council-manager cities generally in the 1930's. The professionally trained first administrator began in 1934 to give part of his time to the Subsistence Homesteads Division of the Department of the Interior and finally went to Washington full time as chief of management for the Resettlement Administration in 1935. Prior to 1934, part of his salary was paid by the Corporation. The early recreation director left in 1935 to become head of adult education for the City and County of Denver. For five years a young man trained by them served as manager. When he resigned in 1941, it was clear that Radburn's substantial growth was stopped; a board largely of resident trustees was eager to reduce the administrative overhead. A committee of the trustees reported to the board that it had interviewed four local candidates, preferring a resident familiar with local problems. The manager selected, a resident since 1930, had been the editor and publisher of a local weekly, well liked in the community, active in the Boy Scouts, but with no professional training in administration, community organization, recreation leadership, or adult education. His starting salary was little more than that of a police officer in a small city at the time.

With this background of setting, framework, and conditioning factors, it seems appropriate to relate some salient episodes in twenty years of operation under "government by contract" at Radburn.

CONTROL OF DESIGN AND USE

PROVISIONS OF THE DOCUMENTS

"Declaration of Restrictions No. 1" deals with the location and design of structures and the use of land under three of its articles: "Approval of Designs and Supervision of Structures" (Art. Three); "Set Backs and Free Spaces" (Art. Four); and "Uses" (Art. Six). Although the legal language is formidable, the substance is simple, and much the same as that of many established real estate subdivisions.¹⁶

16. See Seward H. Mott and Max S. Wehrly, "Subdivision Regulations and Protective Covenants: Their Application to Land Development," *Technical Bulletin No. 8* (Washington: The Urban Land Institute, 1947), a brief eight-page summary. A generally well-considered conventional set of restrictions "controlling the development of a medium-

In substance, no structure¹⁷ is to be erected or altered without written approval of the Association. Approval may be withheld for aesthetic or other reasons. (The phraseology here is the same as that in the Colony Hills Trust, upheld by the Massachusetts court in *Parsons v. Duryea*, p. 264). No plot may be resubdivided without approval. The Association may hire architects to review plans and inspectors to supervise construction and pay the costs out of the general fund arising from the assessment or it may charge a fee. (In practice, the Association has never charged a fee.)

Building lines shall be maintained, where established on a filed map or in a declaration of restrictions; encroachments must be approved by the Association, which is given the power to vary them in case of undue hardship because of topographical or other conditions.

Nuisances are prohibited. As defined in 1929, the sale of "malt, vinous or spirituous liquors" was a nuisance. The only significant amendment to the Declaration in twenty years was the exclusion of this phrase in 1933, after the repeal of prohibition. No change in use is permitted without approval: such as an increase in the number of families occupying the dwelling, or the conduct of a profession or home industry in a dwelling. No business shall be conducted in a dwelling, but the Association may permit community uses, such as day nurseries, health clinics, or social clubs in dwellings.

The by-laws of the Association, adopted at its first meeting, spell out for the home-owner the "Procedure on Approval of Designs and Supervision of Structures" (Art. XI). The trustees are annually to designate three of their number as a Committee on Architecture to exercise the powers above outlined. The trustees may hire a supervising architect. Designs shall be submitted to the manager, who may approve them as submitted or modified, and his approval is final, except that proposals modifying setbacks or use must be approved by the Committee on Architecture. Appeal is provided from disapproval by the manager to the committee.

grade subdivision" in California is reproduced in full as an appendix to McMichael, *op. cit.*, pp. 345-57. The sponsor, Walter H. Leimert, has been a subdivision developer since World War I. Some of its planning concepts seem outmoded: "out-houses" must be on the rear quarter of the lot; fences or boundary walls may be six feet high. In the light of the legal principles expounded in chap. II it is not clear why the limitations are throughout called "conditions and restrictions," when there is an express stipulation that no provision shall be deemed to vest or reserve in the developer or the Association any right of reversion for breach or violation (Art. XVI). Right of reversion is the distinguishing characteristic of a condition.

17. Formidable language ("No building, fence, hedge, wall, sign . . ."), while forbidding, avoids litigation. Appellate courts have been called upon to decide that a fence is not "a structure," *Himmel v. Hendler* (1931) 161 Md. 181, 155 A. 316; and that a brick wall seven feet high is not a "fence or other structure," *Wolf v. Schwill* (1917) 282 Ill. 189, 118 N.E. 414, (1919) 289 Ill. 190, 124 N.E. 389.

Note that the home-owner is protected in his dealings with the manager. The trustees must find ways of assuring that the manager follows their policies. An owner or mortgagee may, at any time, if the facts warrant, obtain a certificate of compliance from the manager in form suitable for recording by the county recording officer. This provision eliminates questions about marketability of title that worry the draftsmen of "clearing statutes" (see pp. 258 ff.).¹⁸

In some subdivisions spectacular provisions have been made to assure that distinguished architects should review all building plans submitted. Mr. Vanderlip, prior to 1929, set aside a substantial sum in trust, the income to be available to pay adequate fees for an "art jury" of architectural leaders of Southern California to pass on all buildings proposed for Palos Verdes. J. C. Nichols, however, in his extensive experience in the Country Club District of Kansas City, supports the approval of plans by a board of the community association.

These directors have a vital interest in the continuance of the established character of the development . . . and afford a sound medium for perpetuating the ideals and standards of the development. They are free to command the advice of architects whenever needed.¹⁹

ADMINISTRATION OF CONTROL

At their first meeting, the incorporators and trustees of the association adopted the by-laws. They designated a supervising architect pursuant to Art. XI thereof. Clarence S. Stein offered to serve as a volunteer ad interim. The hope was expressed that ultimately a young local architect might be found to serve. Mr. Stein resigned in 1931 and another of the Corporation's distinguished consulting architects was named. The records do not show when Frederick L. Ackerman resigned, but there is no record of his replacement and in fact the manager and trustees have resolved all issues to their own satisfaction without consulting a supervising architect.²⁰

The trustees appointed a Committee on Architecture, pursuant to the by-laws, and instructed them to prepare a Code of Standards of Architectural Control of Residential Areas in Radburn, which was adopted at the second meeting of the trustees in May, 1929.

18. Mr. Leimert's restrictions, cited in footnote 16, go further. One year after the issuance of a municipal building permit, a structure shall be deemed to comply with the restrictions "in favor of purchasers and encumbrancers in good faith and for value," unless the Association records a certificate of noncompletion or noncompliance or legal proceedings are instituted. McMichael, *op. cit.*, p. 350.

19. Quoted in McMichael, *op. cit.*, p. 216.

20. The manager states that most applications have been for alterations. When owners of homes outside the restricted area have applied to come under the restrictions, the Committee on Architecture has usually not had to examine blueprints; it could inspect a completed house and has used its own judgment.

This "Residential Architectural Code" gave the manager authority to approve all designs authorized by the Committee on Architecture ("formal approval"), others must be referred to the committee ("special approval"). The Code provided for a fee of 1 per cent if the estimated cost exceeded \$1,000, but in fact no such fee has been charged.

The Code then listed some eleven foreseeable classes of change that would inspire home-purchasers seeking to make their castle more personally their own—porches, vestibules, rooms over porches, dormers, laundry-yards, garages,—stated limits of tolerance for some within which formal approval could be given and reserved the right to the committee to pass on others. The Code dealt similarly with changes in exterior color and trim, signs and other structures on the grounds, and fences. The only article of the Code requiring amendment during twenty years has been the one on fences.

In practice, the first manager found that the simplest way to minimize violations of the Code, most of which would be entirely inadvertent, was to present home-owners attractive and cheap solutions for their problems that conformed to the trustees' standards. To protect gardens against neighbors' children and dogs, or to restrain their own runabouts, owners wanted fences. The manager offered a choice of several standard approved designs, with addresses of suppliers and prices. When these approved types became unobtainable in the market, the resolutions were amended to authorize others. In 1947 a newly fashionable "corral-type" (low) rail fence was added to the approved list. The manager states that several such fences were built about that time without approval. The Architectural Committee decided that they were not offensive and recommended to the trustees that their use be regularized. The maximum height prescribed in the Code is the standard height used by manufacturers.

Similarly, by persuading the local supply store to keep in stock at low prices exterior paints in approved shades, the management minimized unpleasant deviations resulting from that form of spring fever of which the symptom is the heedless Saturday rush for "a gallon of green paint."

PROBLEMS AND ISSUES PRESENTED IN TWO DECADES

A review of the records of twenty years shows the following as characteristic issues of control:

Nonresidential use of dwellings.—The trustees on three occasions have authorized the manager to issue a personal, nontransferable license, subject to regulations to be established by him, to the owners of two different dwellings to use them as day-care nurseries or a nurs-

ery school (1930, 1932, 1934). The first license was revoked after two years on the manager's recommendation (1932).

Professional use of dwellings.—Several physicians have been permitted to maintain offices in dwellings and to display modest signs on their lawns (1930, 1945). One owner has been permitted to conduct an insurance business in his basement "provided he conformed to all the regulations in the By-Laws" (1942); another has been authorized to use his home address on his business letterhead (1946).

Nonstructural uses of land.—The trustees have dealt with mounds and rock gardens (Committee on Architecture instructed to report, 1933); a barber pole (left to the manager's discretion, 1941); unsightly trees and hedges (report from the Committee on Architecture, referred to the manager for action, 1948);²¹ a glaring light in the driveway of an apartment house (the manager to communicate with the new owner, 1949); a terrace (objection by a neighbor referred to the Architectural Committee, protest overruled after inspection and consultation, 1949); an icebox on a window ledge (objections by neighbors; stated to be temporary, pending arrival of a refrigerator; complainants satisfied, 1946).

Lodgers.—Only one objection to entertaining lodgers has come before the trustees (1943). The manager states that the practice was tacitly tolerated during the war but that no instances are now known.

Sale of liquor.—For some years after the amendment to the Declaration of Restrictions removing the prohibition against the sale of liquor, the trustees authorized the manager to grant annual licenses, to run concurrently with the licenses issued by the public authorities (1934–37). This was apparently deemed a work of supererogation and abandoned.

Jurisdiction declined.—The manager has reported his tentative disapproval of a portable swing; the trustees have decided that it was not covered by the restrictions, although it was ugly and its use should be discouraged (1934). A complaint about the keeping of pigeons has been referred to the Board of Health, although the manager was asked to use his good offices to adjust the neighbors' complaint (report: problem left with the resident involved by mutual consent, 1940).

Inevitably complaints about dogs have come before the trustees. The

21. "Declaration of Restrictions No. 1," Art. Three, Sec. 5, authorizes the Association to trim trees or hedges, especially where they are unsightly or impede visibility for traffic, at the expense of the owner and similarly to remove grass, weeds, or rubbish from unkempt property. On one occasion a tenant of the life insurance company as mortgagee-in-possession showed conspicuous lack of interest in maintaining his grounds to the distress of his neighbors. The Association cleaned up the grounds and billed the insurance company as landlord. The modest bill was paid.

manager has been instructed to arrange for the patrol of Radburn by the borough dog warden and, if necessary, to pay him small supplementary compensation out of administrative funds (1935); at another time, the manager has been instructed to warn the community that dogs not on leash would be turned over to the public authorities (1938).

INFORMALITY OF ADMINISTRATION

In so intimate a community as Radburn, especially since the trustees have been predominantly residents, mechanisms designed for a town of 25,000 have not been followed slavishly. The president of the Association has presented a neighbor's application for change to the full board, which has disposed of it without referral through channels. The trustees have permitted the use of the swimming pools to families not resident in the restricted area out of community sentiment (for excellent work with a Boys Club, 1940, 1948), safeguarded as personal licenses. When objections were voiced, the privileges were withdrawn (1948). The athletic club from a neighboring community has been permitted to use the Association's baseball field on Sundays "from week to week," at a time, according to the manager, when Radburn had no team of its own and the residents wanted to see ball games (1946).

When substantial issues have arisen, the entire board has viewed the premises or has taken part in negotiations between complaining owners and the builders of nearby houses seeking the benefit of the restrictions, leading to modifications in their design (1948).

ROUTINE ADMINISTRATION AFTER TWENTY YEARS

It may be of interest to note how the architectural control is working after twenty years. The files of the manager show fifty applications for approval of design between January, 1948, and March, 1950. Of these, nineteen are countersigned by the chairman of the Committee on Architecture; thirty-one are signed by the manager, who states that many of them were discussed informally with the chairman. Five involved an extension of a building (including a \$200,000 addition to the telephone company's exchange); four, the addition of dormer windows; five, the enlargement of a garage or provision of a lean-to.²² One involved a terrace which gave rise to objection from the neighbor, who complained that the proposed change in grade obstructed his view; the Committee overruled the objection. Eighteen involved the con-

22. The increased size of automobiles over twenty years apparently makes it difficult for a suburbanite to continue to store his lawn mower and his boy's bicycle in the garage.

struction, extension, or inclosure of porches; seventeen the erection of fences, mostly picket fences 3 feet high. The manager dealt with the applications for fences on his own authority. From the evidence available, it is hard to spell out the reasons for referring some, but not all of the other classes of applications to the committee or its chairman.

ENFORCEMENT

In 1931 the trustees commented on the unauthorized changes taking place in Radburn and instructed the Architectural Committee to exercise closer watch. In 1934 the Parks and Gardens Committee of the Citizens Association suggested that the trustees remind residents of the requirements for control; the Architectural Committee was instructed to issue a warning that no resident should incur any expense before obtaining approval. In 1947 the Architectural Committee proposed a letter to all home-owners and tenants citing the relevant provisions of the Declaration of Restrictions.

One of the difficulties that has faced the trustees in all their work is the turnover of occupancy, whereby new residents arrive who must be made freshly aware of their obligations under the community scheme, which to them means chiefly the children's recreation program and the pleasurable benefits of swimming pools, tennis courts, and other recreation facilities.

The manager states that his routine enforcement is facilitated if the construction or alteration is extensive enough to call for a municipal building permit: the borough building inspector warns the applicant that he must also have approval from the Association. Moreover, the contractors in the neighborhood who carry on most of the alteration work are familiar with the restrictions. The manager has several times stopped unauthorized conversions of attics into independent apartments because neighbors have commented on the delivery of plumbing and kitchen equipment.

A few unauthorized changes have come before the trustees—not more than six in twenty years. One, oddly enough, involved the industrial building originally occupied by a subsidiary of City Housing Corporation, the Radburn Brick and Supply Company. After the Corporation's financial difficulties and reorganization in bankruptcy, new faces appeared as its local agents, in charge of the management of its properties. Neighbors complained that a shed was being added to the warehouse. The chairman of the Architectural Committee (a spokesman for the Corporation) ordered all work stopped and asked the president to call a special meeting of the trustees, who visited the site en masse. The head of the management office apologized for his oversight and agreed to exterior changes requested by the trustees.

He submitted an application in the form desired, which was approved (1947).

Most of the other issues that reached the trustees seem slight in substance: the erection of a playhouse (1937), of an unauthorized fence (1947). Why did these involve the full hierarchy of control? One of the arts of administering deed restrictions is to have a nose sensitive to a neighborhood feud.²³ The fence of 1947 was not greatly different from dozens of other fences, but the neighbors' objections were more attention-compelling. Ultimately the owner acceded to suggestions by the chairman of the Architectural Committee to alter the fence and submit an application for approval. The main efforts of the trustees were in calming down the neighbors.

A CAUSE CÉLÈBRE

As early as 1934 the trustees stated that, while they recognized the jurisdiction of the Architectural Committee, in any case in which litigation seemed a possible result of the Committee's action of disapproval, they desired the matter to be discussed by the full board before a final position was taken.

In 1938 a physician applied for permission to inclose and extend the porch of his dwelling in such a way as to create an "L," which he evidently proposed to use as an office. At a hearing of the Architectural Committee, his application was rejected; the Committee explained "what would be acceptable." The Committee sought the advice of the full board, which voted to reject the plan submitted as encroaching too closely upon the neighboring plot (November, 1938).

The physician nevertheless started to build. After an informal meeting of the Architectural Committee with some members of the board, the Committee presented a draft of a forceful letter at the next board meeting. A trustee questioned "the action indicated in the letter." When it appeared that a hearing was scheduled before the borough "Zoning Board," the matter was tabled pending the outcome of the hearing, which the chairman of the Architectural Committee was requested to attend (January, 1939).

It was reported to the next meeting of the trustees that the borough recorder had dismissed the neighbor's complaint for insufficient evidence. The Architectural Committee was instructed to assure whether actual construction conformed to the filed plans, the manager was advised to take photographs of the addition. The matter was tabled (February, 1939).

At the board meeting two months later, it appeared that construc-

23. Charles S. Ascher, "Some Reflections on the Art of Administering Deed Restrictions," 8 *Journal of Land and Public Utility Economics* 373 (1932).

tion was not in conformity with the plans. Opinion was divided whether to take legal action to compel alteration. It was voted to notify the physician that the Architectural Committee had advised the manager that there was a violation and that legal action would be discussed at the next meeting (April, 1939).

At the next meeting there was a full-dress debate. The view of the president of City Housing Corporation (then still a trustee) was presented in his absence, that if the chances of success were "only fifty-fifty," the Association should not sue; if the chances were favorable, suit should be brought "in view of the conditions of the restrictions and other circumstances." A nonresident trustee, an attorney active in the housing movement in New Jersey, asserted that protection of the restrictions was fundamental and that a new appreciation of planned communities was growing up in legal circles. A resident trustee, an attorney and former president of the Radburn Citizens' Association, stated that the trustees were under a legal and moral obligation to enforce the restrictions. It was voted to proceed by suit in chancery to compel the removal of these parts of the addition not in accord with the plans approved by the Architectural Committee (May, 1939).

A month later the trustee-attorney to whom the action had been intrusted reported that certain formalities must be complied with (the appointment of a statutory agent, filing a certificate of the officers of the Association), but that suit was proceeding (June, 1939).

In the fall the attorney reported that he had drawn a bill in chancery, but desired to take further legal counsel before filing it (September, 1939). A few weeks later he reported that at a special hearing the Court had supported the bill and had referred it for hearing in chancery with slight modifications. The defendant's lawyer had offered to submit an amended application, if the board would entertain it, and had offered to pay the Association's attorney's fees and court costs (October, 1939).

A month later it appeared that the defendant was now unwilling to pay the fees and costs. He offered to submit amended plans and to pay \$25. The trustees referred the matter to their attorney-member to negotiate a settlement (November, 1939). The last entry in the trustees' records, two months later, indicates that the settlement had not yet been reached (January, 1940).²⁴

EVALUATION OF CONTROL

The only lawsuit in twenty years of architectural control of Radburn has been pictured in the tedious length of the fourteen months

24. The suit was finally settled by the defendant's paying the Association's legal fees.

that the trustees wrestled with it, hesitating long before taking formal action, seizing eagerly at an offer that would affirm the principle of control, though in fact approving the undesired addition (which in its final form constituted a full two-story wing with office and waiting room below and chambers above). The episode confirms our earlier statements that the sanctions of private covenants are slow, expensive, and uncertain.

But the true evaluation of the effectiveness of the controls is a visit to Radburn in 1950. One would find it hard to identify the subject of the lawsuit. The bricks of the addition have weathered to match the main dwelling; the wing is covered with ivy, shaded by trees. It casts no shadow over the neighboring house. The total impression of a walk through Radburn is of a well-maintained and harmonious community. The parks rival those of a great estate in France or England in the maturity of their landscaping. True, the planners had contemplated wide sweeps of lawn between each lane of homes, while the owners have preferred to identify their own gardens by low fences. Some, without violating any restriction, have let privet hedges grow 6 feet high, making their gardens a true extension of their private living-rooms.

Without doubt, the constant vigilance of the Association in support of the desires of most of the residents has served to check the thoughtless or selfish, more by explanation, mediation, and adjustment of differences than by police action. Experience in large-scale low-rent housing projects shows that the same results can be achieved by management vis-à-vis tenants. But if a redevelopment agency is not to remain a landlord of all its redeveloped areas, it cannot at this time rely on the police power to achieve the results that private restrictions have achieved at Radburn and elsewhere, even with occasional pulling and hauling.

THE ASSOCIATION AND THE MUNICIPALITY

TRANSFER OF ACTIVITIES AND COSTS

We have already explained the expectation of the framers that the municipality would gradually take over services initially provided by the Association, thus freeing the Fund created by the charge or assessment for newer activities (p. 284).

These expectations have been realized in part, perhaps more slowly than originally hoped for. The budget for 1931, when about two hundred and fifty dwellings were subject to the charge, was set at about \$40,000. A list follows of items in that budget for services subsequently

taken over by the municipality (and the date of last contribution by the Association):

Sewerage (at \$5 per house)	\$1,050	1945
Garbage removal (second weekly collection now provided by the borough in the summer only)	1,200	1940
Street lighting	4,000	1937
Police	3,400	1933
	<u>\$9,650</u>	
However, the Association still hires a special officer to patrol its property in the summer months, at	500	
Total costs taken over by the borough.....	<u>\$9,150</u>	

The borough council has not been willing to supply free water to the Association's two swimming pools for fear of creating a precedent, and the Association's water still averages \$1,000 a year, but after extended negotiations the borough council voted in June, 1944, to appropriate \$1,000 a year to the Association for miscellaneous services performed for the borough, such as cutting the grass on the verges of the public highways crossing Radburn, maintaining the lawn around the public grammar school situated in one of the superblocks and permitting the school to use the Association's playground. Broadly, then, it can be estimated that services that consumed about one-quarter of the Association's expense budget in the first years have now been taken over by the borough.

Since the beginning the Association has maintained a lending library in a room next to the manager's office. For years women of the community served as volunteer librarians a few afternoons a week and the Association appropriated about \$300 a year to buy books. After fifteen years, in 1944, the trustees instructed the manager to investigate making the library a branch of the Fair Lawn Public Library and the president (as a first step) was to ask the mayor to appoint a resident of Radburn to the Fair Lawn Library Commission. The Commission, after four years of desultory negotiations, indicated its readiness to absorb the Radburn Library in 1950 and the trustees of the Association agreed, "contingent on approval by the Radburn residents coming under the restrictions." Because of a nonrecurring increase in expense in 1950, the acquisition of the Radburn Library by the Commission was again deferred. Meantime, with demands for better service from more residents, upon request of the Citizens Association, the trustees included \$450 for a part-time librarian in the budget for 1946 and by 1950 the budget provided \$950 for salaries, books, and rent. This cost the Association will continue to bear until the borough takes over the Library.

SUPPLEMENTARY MUNICIPAL SERVICES PAID BY THE ASSOCIATION

Education.—It was considered an omen of Radburn's acceptance by the Fair Lawn community when the voters of the entire borough on a referendum authorized a bond issue to build a grammar school in the heart of Radburn in 1930. During the first ten years of Radburn there was no public high school in Fair Lawn. The borough Board of Education made the customary contract with the industrial city of Paterson across the Passaic River to the west to pay for the tuition of students from Fair Lawn. Radburn parents much preferred the education and less crowded classrooms offered by the high school in the pleasant residential Borough of Ridgewood to the north, which charged from \$50 to \$75 more tuition than Paterson for nonresident pupils. The Borough of Fair Lawn was not ready to contract with Ridgewood at this higher rate.

At the annual public hearing in 1935, tremendous pressure was brought on the trustees to include tuition for high-school children in the Association's budget for 1936. The Citizens' Association presented a petition signed by three hundred property-owners, although there were only about thirty families with about forty-five children of high-school age. It was argued that this action was necessary to continue to attract desirable families to Radburn. The City Housing Corporation which, at the bottom of the depression, found itself again the owner of one hundred and thirty-five houses, twelve vacant, supported the plea, although a large part of the cost would fall upon it.

The trustees believed that there could not be adequate public understanding of the cost implications of the proposal, with the rapid prospective growth of number of children of high-school age. They adjourned the hearing for twenty days and instructed a committee to issue a statement analyzing the issues. At the adjourned hearing, after extended discussion, the trustees amended the budget to include \$3,000 for high-school tuition payments, and instructed the manager to issue a statement that the trustees accepted this step as a temporary solution to a pressing problem and urged the residents to continue to seek a permanent and satisfactory solution.

A year later the same issue was agitated. Prior to the budget hearing in 1936, the Citizens Association conducted a referendum vote, stated to be a tabulation of opinion to guide the trustees, but not to constitute a mandate to them. At the budget hearing, the trustees, with general approval, voted to continue the payments through the current school year, and to defer a further decision. At the meeting of April, 1937, the trustees voted to discontinue further payment, on a resolution pre-

sented by Spaulding Frazer, a nonresident trustee, setting forth that the Association had amply shown its recognition of good education as one of the community ideals, that the decision lay clearly in the discretion of the trustees, that it seemed unfair to the general body of property-owners for the small number of families benefited not to assume the cost of their children's education.

By 1939 Fair Lawn built its own high school and the issue ended. It has been recounted here partly as an example of community administration in action, revealing the relationships between the trustees and the residents.

Recreation.—From time to time it has been pointed out that the Association's recreation program covers activities that are, in part, a legitimate charge upon a board of education. An analysis by a citizens' committee in 1938 found that four-fifths of the winter recreation program for grade-school children "might be considered a function of the local educational system."²⁵ In 1939–41 there were frequent meetings of the P.T.A., the trustees, the manager, and the supervising principal of the public schools to adjust the Association's contribution to the school recreation program in the light of limitations imposed by the State Commissioner of Education.

Since 1946 the Association has put its tennis courts at the disposal of the Fair Lawn High School team for practice and home games. On the other hand, in 1943, the borough council voted to lend a borough-owned backstop for the new Radburn Association baseball field without requiring a guaranty from the Association.

Fire protection.—Fair Lawn is served by a volunteer fire department. In 1931 the Association budgeted \$500 to extend the fire-alarm system to new areas in Radburn and the Association was asked to pay for helmets for the Radburn Volunteer Fire Company.

In 1935 the Association contributed \$850 toward the cost of a new fire house to house the new engine acquired by the borough for the Radburn company; since 1939 the Association has contributed annually to payments on the mortgage on the fire house. The Association also pays \$115 a year toward accident and disability insurance for the Radburn volunteers, beyond the small amount provided by the borough.

25. *Report of the Special Evaluation Committee of the First Citizens' Association of Radburn, New Jersey, November 1, 1938* (49 pp., processed), pp. 38–39. This report, the result of a year's committee work, was financed by the Carnegie Corporation of New York, which, through the American Association for Adult Education, had made a three-year grant of \$22,400 in 1931 in support of the Association's adult education program. Robert Hudson's *Radburn: A Plan of Living* (New York: American Association for Adult Education, 1934), is a record of that demonstration. The Carnegie Corporation was interested to ascertain its continuing effect.

Sidewalks.—The footpaths, so integral to Radburn's plan, were all deeded to the Association. After a decade or more, they needed repair. In 1943 the mayor offered to have temporary repairs made by the borough, but the borough attorney rendered an opinion that the borough had neither obligation nor authority to repair private "sidewalks," a view in which a lawyer-trustee concurred. Reference was made to a New Jersey statute (L. 1941, c. 207) under which a municipal council, by two-thirds vote, could provide maintenance of private sidewalks, if the resolution recited that it was to the best interest of the municipality; but it was the consensus of the trustees that such action by the council was not probable. Since 1945, the Association had budgeted \$1,000 a year for repair of the walks.

Municipal relations.—The initial impact of Radburn on Fair Lawn was not unlike that of many new large-scale housing projects that threaten the established political and social patterns of the area into which they are introduced. The borough officials welcomed the promise of millions of dollars of new taxable property, but were troubled by the unorthodox site plan and unprecedented and unpredictable demands for service.

The local tax assessor, an employee of a large New York bank, had as a labor of love invented his own "scientific" and objective method of valuing each element of the farm houses and cottages on his rolls. Radburn introduced structures that did not fit on his cards. Nevertheless, he accepted the principle of the Gramercy Park decision (chap. i, pp. 229–30) and assessed the parks and community facilities owned by the Association at \$100 per acre, assessing the value over the properties benefitted, thereby also increasing the sources of revenue of the Association under its private charge.

In 1935 the residents of Radburn voted overwhelmingly in favor of a bond issue for a high school, but the voters in the rest of the borough rejected it. "This was the culminating episode of several years of friction between Fair Lawn and Radburn residents. . . . Some of the things we said and did in the early days didn't enhance our popularity at [Fair Lawn] Center and a feeling of resentment slowly matured."²⁶ But in 1938 the borough voted again on a proposal for a high school and it carried. By that time it had become apparent that Radburn was preponderantly of the same political party as Fair Lawn, though probably with a larger independent vote and a more articulate minority. By that time two members of the school board, the mayor, one councilman and the borough recorder were residents of Radburn; indeed, in 1938, the republican and democratic candidates for mayor were both from Radburn. Several community leaders have emerged first as trustees of the

26. *Report of the Special Evaluation Committee . . . of Radburn, etc.*, p. 5.

Radburn Association and then moved on to public office in the borough. It is interesting to note that when early fears were allayed, the citizens of the borough accepted leadership from the new group.

It thus became increasingly easy for the Association to deal informally with the municipal government, when the negotiating committees included current and former trustees on both sides of the table.

FINANCE: THE CHARGE AND ITS ADMINISTRATION

FIXING THE CHARGE

The novel provisions of "Declaration of Restrictions No. 1" for unprecedented flexibility in fixing the annual charge or assessment have already been described (pp. 283-84).

At their second meeting in May, 1929, the trustees, on motion of Mr. Brownlow, adopted an "Administrative Code (Budget Control)," providing for classification of accounts, designating appropriation items by activity, by purpose, and by objects of expenditure; and distinguishing those classes of transfers of appropriations which the manager could make in his discretion from those which must be presented to the trustees for control. The manager presented a budget for the remaining nine months of 1929 which was adopted. The trustees agreed that the manager should present a draft budget for 1930 to them before the public hearing required by the Declaration of Restrictions. The records show that in practically every year the manager has submitted a proposed budget to the trustees in November, drafted frequently after consultation with the officers and finance committee of the board; and the board has devoted most of an evening to a review of the proposals item by item.

PUBLIC PARTICIPATION

The trustees faced their first public hearing at 3:00 P.M. on an afternoon in December, 1929, like actors on an opening night, but nobody appeared in response to the advertisement. It was agreed in 1930 that the hearing should be held in the evening. With some behind-the-scenes persuasion from the Corporation's local sales force, over eighty residents thronged the assembly room, some standing in the rear during a two-hour hearing. Trustee Spaulding Frazer remarked *sotto voce* that on the fixing of the municipal tax rate in Newark not more than half a dozen professionals showed up at a public hearing. The attendance has varied across the years. Controversial issues have brought out fifty to sixty residents, in other years "a few general questions from the small group attending" have been recorded. The significant fact is in at least six of the twenty-one years the trustees modified the budget in

the light of the discussion at the public hearing. In several other years, while the trustees finally adopted the draft budget, it was only after extended question and debate among the residents present.

RATE OF CHARGE MAINTAINED BELOW CEILING

In the first years of expected rapid growth, City Housing Corporation subjected to the restrictions (and the charge) its store-and-office building and tracts of land next in line for development, so that little more than half the revenues came from charges on the as yet small number of homes. The Corporation backed the Association in budgeting for deficits of \$4,000 to \$5,000 in a total budget of \$35,000 to \$40,000, in its eagerness to see the community activities well launched. The trustees voted borrowings in anticipation of revenue (first from the Corporation, then from the local bank) and budgeted for debt service, as authorized by the Declaration of Restrictions, Art. Five, Sec. 8. The last loan was liquidated in 1940. For the first few years the trustees regularly fixed the rate of charge at the maximum permitted, one half of the public property tax rate for the previous year.

This report cannot describe the vigorous and varied community life that this Fund supported in the initial years. Long before it had been dreamed possible, the manager reported the establishment of a well-baby clinic, a nursery school, supervised recreation indoors and outdoors for adolescents, and an adult program that included archery, cricket, amateur theatricals, a choral society, a stamp club, and language classes.²⁷ George Denny's "Town Hall of the Air" was an outgrowth of the discussion forums in which he participated in the initial years at Radburn.

The deepening of the depression forced the withdrawal of the extra support by City Housing Corporation and impaired the ability of the residents to finance these interesting activities. Clinics and forums disappeared. Boards of predominantly resident trustees have sought to keep the rate of charge at a moderate level, rather than to collect the maximum. They conceive their main responsibility to be to maintain the physical properties intrusted to them and to provide a supervised recreation program, mostly athletic, chiefly for children. Radburn adolescents today form part of a larger group, centered in the Fair Lawn High School. It is debatable whether a Radburn-centered program would attract them or be socially wise. A few thoughtful residents bemoan the loss of impetus of community activity, but the trustees' policy seems to have general support. With the exception of a few modest subventions, the trustees expect adult groups with special cultural interests to pay their own way.

27. See Hudson, *op. cit.*

MAXIMUM PERMISSIBLE RATES AND ACTUAL RATES OF CHARGE, BY YEARS

Calendar Year	Maximum Rate	Actual Rate	Calendar Year	Maximum Rate	Actual Rate
1930.....	\$2.325	\$2.325	1940.....	\$2.36	\$1.96
1931.....	2.06	2.06	1941.....	2.29	1.81
1932.....	2.155	2.155	1942.....	2.155	1.79
1933.....	2.41	1.955	1943.....	2.085	1.76
1934.....	2.12	1.955	1944.....	2.21	1.90
1935.....	2.275	1.955	1945.....	2.29	1.93
1936.....	2.44	2.165	1946.....	2.61	1.95
1937.....	2.39	2.221	1947.....	2.82	2.05
1938.....	2.51	2.03	1948.....	2.83	2.16
1939.....	2.49	2.30	1949.....	3.41	2.14
			1950.....	3.28	2.18

CHARGE ON COMMERCIAL AND INDUSTRIAL PROPERTY

Until 1943, the trustees availed themselves of the power granted in the Declaration of Restrictions to set varying rates of charge "for various general classifications of property, according to the use and/or location thereof; provided, however, that the rate . . . for commercial or industrial property shall not exceed the rate . . . for similarly situated residential property" (Art. Five, Sec. 1).

A national manufacturing company early erected a warehouse in the area originally intended for industrial use, more than a mile south of the residential area first developed. Until 1934, a nominal charge of \$1.00 was set for this parcel, since it enjoyed practically none of the benefits of the Association's activity. For 1934 to 1944, this parcel was assessed at one-half the residential rate. In 1944 at the instance of the then owner, another national industrial company, the Association formally amended the Declaration of Restrictions to remove this parcel from its operation, since the industrial district had never developed.

From 1930 through 1942, other commercial and industrial properties were charged one-half the residential rate, including the store-and-office building, the telephone exchange, a warehouse, and a filling station. Beginning in 1943 these properties were charged at the full residential rate. The life insurance company then in control of the commercial properties as mortgagee-in-possession remonstrated against the increase, but the trustees reaffirmed their decision in 1944.

COLLECTION OF THE CHARGE

City Housing Corporation sold homes at Radburn against an "all-in-one" monthly payment, including one-twelfth of the annual interest and amortization and estimated taxes and other charges. It was exceptionally easy for the Corporation to collect one-twelfth of the Association's assessment in the same payment. The trustees at their first meeting, as authorized in the Declaration of Restrictions, designated the

Corporation as collection agent. For some years the Corporation remitted to the Association each month the total sum due, whether collected from the owner or not, resulting in advances at times of more than \$3,000. Presently it notified the trustees that it could not continue this practice (1933). Ultimately when the Corporation went into bankruptcy, over \$7,000 in its hands, collected for the account of the Association, was impounded, to the embarrassment of the Association (1935). It took several years to obtain the release and payment of the full sum withheld. As the reorganization of the Corporation dragged through the courts, the Association gradually arranged to take over the collection of the charge. The charge is now due in advance in quarterly instalments, with 7 per cent interest on payments in arrears. The manager maintained 655 accounts in April, 1950.

The billing, bookkeeping, and dunning on these payments absorbs a substantial part of the time of the manager's office. The trustees, too, have spent time at many meetings discussing the collection of delinquent accounts. They have shown the greatest caution about pressing for legal action. Time and again authorization of suit has been deferred to the next meeting. This policy has proved wise, because while the delays are annoying, in fact practically all charges are ultimately paid. In August, 1950, there were no charges unpaid for any period prior to 1950.

A lawyer-trustee in 1941 submitted an opinion that the charges were enforceable in a legal action for debt, viewing the Declaration of Restrictions as a contract; and that there would be no defense to an action if evidence were presented of compliance with the proper formalities in the imposition of the charge.²⁸ Some suits have been begun, but none has been pressed to judgment.

Both the Declaration of Restrictions and the by-laws of the Association provide that the manager shall furnish an owner on demand a certificate of payment of the charge, which "shall be conclusive evidence" of the payment. Such a certificate would be useful chiefly on the sale of the property: none has been demanded in a decade.²⁹

28. The draftsman of the *Restatement of the Law of Property* states that subsequent owners would not be personally liable, since under the rules in the *Restatement* the covenant to pay to the Association would not run with the land for lack of "privity" between the promisor and the Association. He agrees, however, that the express provision that the charge should be a lien on the land would bind the land in the hands of a subsequent owner. On several occasions the Association has waited for payment until the sale of the house and has then collected out of the moneys paid to the seller by the buyer at the title closing.

29. The Leimert restrictions, quoted in McMichael, *Real Estate Subdivisions*, go further and provide that the secretary of the Association shall file a list of unpaid charges annually with the county recording officer.

OTHER FUNDS HANDLED BY THE ASSOCIATION

The Association has served as collection agent for a Blue Cross hospitalization insurance plan since 1937, after a local insurance agency had volunteered for a year and then given up.

Several community organizations, on dissolution, have turned over their remaining funds to the Association, against the day when a choral group or a nursery school might again be established. The Association holds \$1,100 in a special account for the nursery school, out of which it pays charges on the stored equipment.

In 1946 a ladies' committee collected \$412.35 to raise a flagpole at the new veterans' memorial athletic field. A worthy flagpole proved to be too expensive, so the money was turned in to the Association, which still held it in 1950.

RANGE OF EXPENDITURES

Auditors' reports on the accounts are available only since 1941, when a fire in the office building destroyed old records. Details of expenditures would not be of general interest in this report. During this period, the total has ranged from \$27,218 in 1941 to \$44,407 in 1948. Of the totals, overhead administration costs one-sixth to one-fifth, maintenance of the parks and walks one-fourth to one-third, and community activities absorb about one-half. If the Association had collected the maximum amount permitted in 1948, it would have had about \$12,500 more to spend. For the average family in Radburn the charge is \$60 to \$70 a year.

SELECTION OF TRUSTEES

The by-laws of the Association provide that the members shall be the incorporators and such persons as shall from time to time be elected to membership by a majority of the members. The nine trustees are to be elected for overlapping three-year terms "at the annual meeting of the members." It is not stated that a trustee must be a member. There are no other legal provisions governing the selection of trustees.

In the Foreword to the "Green Book," it is stated:

It is the expectation of City Housing Corporation and the incorporators of the Radburn Association that as the population of Radburn increases and the residents and owners organize themselves, the right to designate one or more Trustees . . . will be given to their representatives, and that eventually the entire administration of and membership in the Radburn Association will be in the hands of the residents and owners or their representatives.

This expectation was coupled with another: that a community of 25,000 would naturally organize into neighborhood citizens' associations, perhaps three or five, which would serve as the vehicles for expression of neighborhood desires and preferences. A First Radburn Citizens Association was early organized; but it has had a fitful life. Residents of Radburn, one is told, will not turn out for meetings unless some matter is up that excites their interest. They seem like residents everywhere else. There have apparently been years on end when no exciting issues were on the horizon and the First Citizens Association did not even meet to elect officers. On other occasions, as on the question of paying tuition for high-school students or in the evaluation committee of 1938, the trustees have found the Citizens Association a useful device for sounding sentiment.

Since the Radburn Association was organized before the first family moved into Radburn, there could be no resident among the original nine members and trustees. Five were officers or employees of City Housing Corporation. Four, including the president, were "public interest" trustees, citizens of northern New Jersey interested in community planning: a physician, a manufacturer, a club woman, a lawyer; and Radburn owes them and their successor "public interest" trustees a debt of gratitude for their conscientious and time-consuming service over many years.

DEVOLUTION UPON THE COMMUNITY

Within a year the by-laws were amended to make the president of the First Citizens Association an *ex officio* member and trustee. Mr. Brownlow, the Corporation's municipal consultant and a trustee, reported that the time was not yet ripe for complete devolution, but that the active citizens' association, touching the affairs of the Association at many points, warranted representation. When this trustee's term as president expired, he was elected to fill a vacancy on the board and served for nine more years, until he left the community. Several other presidents of the Citizens Association were subsequently similarly retained on the board as individuals.

Gradually as corporation officials and public interest trustees resigned for various reasons, the remaining trustees elected residents to succeed them, so that the number of resident trustees has stood thus: 1931, 1; 1937, 2; 1938, 4; 1939, 6; 1943, 7; 1948, 9, when there was no trustee remaining regarded as a spokesman for the corporation.

There have been no members of the Association who were not trustees. In one or two instances, at the expiration of a long term of service, an outgoing trustee has continued as a member for some years,

but the title has been honorary and he has taken no active part in the work of the Association.

The trustee-members have been conscious that they were subject to the charge of being a self-perpetuating body. In 1938, when residents still constituted a minority of the board, the report of the Special Evaluation Committee of the First Citizens Association asserted "that Radburn has now come of age and should assume responsibility for the selection of its Trustees." It proposed two alternative plans, one for increasing membership on the board by electing one representative from each of six subareas by popular ballot; the other for merging the Citizens Association and the Radburn Association.

Neither proposal was adopted, but in response to the report, the trustees began the operation of a "gentlemen's agreement" which is still followed. When new trustees are to be elected, the trustees make a slate of candidates, delegate one of their number to interview each candidate to ascertain his willingness to serve, and then ask the Citizens Association to present two names for each vacancy to the residents (owners and tenants) on a postcard ballot. It is explicitly stated that the preferences expressed are advisory only. The trustees have in fact followed the expressions for more than a decade. The fraction of postcards returned has varied from one-half to one-quarter. Despite the charter provision for overlapping three-year terms, this procedure is followed annually, for eight of the posts, the ninth being the president of the First Radburn Citizens' Association. It is part of the "gentlemen's agreement" that each of the eight shall in fact serve for three successive years.

One of the oldest residents, while still dissatisfied by this process as capable of manipulation, states in 1950 that in fact good men have been selected. Some years ago the trustees included one of their vocal critics on the advisory ballot, but he was not preferred by the residents who voted.

In sum, in the circumstances that have governed in Radburn, devolution has been empirical, without a system that could be recommended elsewhere.

COMMUNITY RELATIONS OF THE TRUSTEES

As a self-perpetuating body, the trustees have frequently been concerned about their community relations. Except for mandatory public hearings, on the tax rate, and on amendments to the Declaration of Restrictions, and for special public hearings on large issues involving substantial financial commitments, the trustees' meetings have been closed. Suggestions have been made many times that they be opened to residents, but the suggestions have not been adopted.

The trustees have been aware that the turnover of property has brought in new residents unfamiliar with the basic scheme, with the intentions of those who established it, and the responsibilities of the trustees. Committees have been appointed to draft a pamphlet explaining the Association, its organization, and work. On one occasion, the printing cost was deemed prohibitive. Similarly proposals to print an annual report of the president or manager have been discarded as too costly. At times the manager has been instructed to reproduce a summary of the meetings in the mimeographed bulletin issued weekly from the manager's office that carries announcements of coming events, advertisements, lost and found, etc. The attitude of the trustees seems more like that of the board of directors of a bank toward its depositors than that of a politically responsible board toward its constituents.

EXTENSION, MODIFICATION, AMENDMENT

EXTENSION

Declaration of Restrictions No. 1 sets forth a series of legal provisions applicable in the first instance to the property described therein. It also states that the provisions can be extended in whole or in part to any other property the owner of which files a "Supplemental Declaration," with the approval of the Association.³⁰ Originally, it was contemplated that City Housing Corporation would subject further areas to the scheme as they were built and ready for sale. In fact, about a dozen such supplemental declarations were filed by the Corporation. When the Corporation gave up its vacant land-holdings, the area already restricted was irregular: houses on one side of a street were included, but not those on the other side. The trustees defined what in their view constituted a "natural boundary" for the restricted area, having regard also to the capacity of existing swimming pools and other facilities. They invited builders within those boundaries and purchasers from them to submit supplemental declarations subjecting their properties to the scheme. Indeed, in 1941 they offered to have the Association pay the fees and costs of drafting and recording such documents, estimated at about \$75. Altogether over one hundred supplementary declarations have been filed, some covering only one house. Almost all homes within the "natural boundaries" are now included, although three large blocks of FHA-insured garden apartments in the center of Radburn have been withheld by the builder (himself a trustee of the association at that time).

30. It is also stipulated that no property shall be deemed subjected except by an express supplementary declaration and that the Corporation is under no obligation to subject any of its other land in the neighborhood.

MODIFICATION

One industrial property some distance outside the "natural boundaries" has been taken out from under the restrictions by a supplementary declaration. Here the machinery of action by the trustees after hearing on notice to the owners of all property deemed by the trustees to be affected has proved simple and effective. It has eliminated the need for consents signed by a large number of property owners.

AMENDMENT

The only substantial amendment in twenty years has been the elimination of the prohibition of the sale of liquor. Again the quasi-municipal device of action by the trustees after notice and hearing has proved simple.

TRANSFER BY THE ASSOCIATION OF ITS RIGHTS AND DUTIES

Article Ten of Declaration of Restrictions No. 1 is worth mention in this monograph, although it has not been and may never be invoked. It provides for the assignment of any or all of the rights and duties of the Association, after due notice to all owners (with the right of more than one-fifth of the owners to exercise a veto) to a "corporation, municipal or private" which consents to accept the transfer. If Radburn had grown to a full-fledged town and had become an independent municipality, this article contemplated the possibility that the Association might merge its government-by-contract with the general municipal government. The mayor and council of that municipality would then be armed with the "trinity of sovereign powers"—and also with powers grounded in ancient doctrines of property law arising out of the promises and consent of the original owners and binding on their successors.

CONCLUSION

Eighteen years ago, in an early symposium on the legal problems of low-cost housing and slum clearance, this writer suggested that none of the conventional tools of property law would prove adequate to express the relationships between the then emerging public housing agencies and the occupants of their projects.³¹ He stated at that time, "In short, the restrictive covenant is a legal, not an administrative device." But by the same analysis, doubt was expressed "whether the lease as it has been used in the past, will be broad enough to encompass all the rela-

31. Charles S. Ascher, "The Housing Authority and the Housed," 1 *Law and Contemporary Problems* 250 (1934).

tionships of housing authority and housed. Perhaps it can be expanded; but what is needed is more of an administrative than conveyancing frame-work." Examples were cited of social and community responsibilities which a public agency could not evade that fell outside the four corners of any lease, deed, or mortgage. An administrative framework was suggested of the promulgation of by-laws, rules, and regulations by the public authority that might be given the force of an ordinance, with penalties for violation.

Such proposals, like the related ones for widespread public land-ownership,³² have not been accepted as public policy. The Housing Act of 1949 says:

The policy to be followed in attaining the national housing objective hereby established shall be: (1) private enterprise shall be encouraged to serve as large a part of the total need as it can; (2) governmental assistance shall be utilized where feasible to enable private enterprise to serve more of the total need . . . [Sec. 2].

The mechanisms of conveyance—the documents familiar to property lawyers—will therefore inevitably be used by redevelopment agencies.

While Radburn is a suburb, the informed reader will assuredly recognize that many of the problems presented are much like those in a project in a central city. Public housing management has dealt with the same issues, which arise whenever large numbers of people live closely together and desire the values of a community and its standards. The thoughtless and selfish must be held to those standards, they must learn to desire them. The police power is not yet available as a sanction for some standards that are important for amenity.

If the redevelopment agency finds that it can use the devices of the public housing agency in its relations with the occupants of its projects, the mechanisms described in this report need not be employed. But if the private enterprise that is to be encouraged will not accept leaseholds, then the redevelopment agency may want to consider the use of machinery for "government by contract." It will be aware of complexities and pitfalls; but it may have the assurance that the machinery has worked reasonably successfully, not only in Radburn, but in many other developments.

One final caution: the officer or legal adviser of a redevelopment agency will always first ask himself what it is that he wishes to control before he selects the tool of control. He will not pick an elephant gun to shoot a squirrel. "Government by contract" clearly is not the device for the regulation of setback lines on a tract of a hundred lots. Nor should restrictive covenants be imposed so meticulously as to retard creative redevelopment and detract from the seriousness of intent that underlies the more important restrictions.

32. See footnote 23, p. 252.

PART IV

URBAN REDEVELOPMENT SHORT OF CLEARANCE:
REHABILITATION, RECONDITIONING, CONSERVATION,
AND CODE ENFORCEMENT IN LOCAL PROGRAMS

BY
WILLIAM L. SLAYTON

EDITOR'S FOREWORD

LIKE many other parts of the urban scene, redevelopment needs and activities are customarily painted in black and white. Some areas are "bad"—blighted; others are "good"—not blighted. Redevelopment consists of buying and tearing down buildings in bad areas and building good ones on the same sites. Most discussions of redevelopment are more or less in these terms. For some purposes, of course, they do well enough, but as a framework of satisfactory public policy, they are too narrow.

Clearly urban areas range all the way from the worst residential and industrial slums to well-located, well-designed, well-built, and well-maintained districts. The gradation is in very small steps indeed. Within most sizable areas, substantial differences are found from block to block and from one building or group to another. In addition, the physical conditions are always changing—sometimes slowly, sometimes rapidly, and at differing rates from area to area. And finally, the tools or measures available to make our cities more efficient, pleasant, and comfortable include—besides eminent domain, the public purse, private finance, design and building—education, group co-operation and pressure, and the police power.

Until recent years relatively too much reliance was placed on police power measures and education as means to combat blight and deterioration. More recently, with the advent of the more or less spectacular clearance-and-rebuilding projects with governmental aid, the older measures have been generally neglected both in discussion and action. Certainly, however, wise public policy lies in recognizing the range of conditions that exist, in devising ways of measuring them sensitively and accurately, and in applying to each condition of blight or substandardness that combination of public and private powers that seems best fitted to yield the desired results.

The discussion that follows deals with the place of rehabilitation, reconditioning, and conservation measures in urban redevelopment as well as with ways and means of putting them into effect. Among the ways and means, police power measures offer the greatest possibilities and also present many difficulties in administration and enforcement.

Mr. Slayton not only has summarized studies and proposals but has made first-hand investigations of current programs in a few of those cities that are now showing the way. His concern is not with the substance of rehabilitation and municipal codes but with their application—how they may be effectively administered as a part of a campaign toward the physical objectives of all urban redevelopment. As pointed out at one or two points, however, his summaries of studies or proposals do not mean that he or URS indorses either the analyses or the recommendations.

The experience Mr. Slayton has explored is too short and covers too few localities to make possible many generalizations. These may come later. But guides to action can be drawn from the experience of these pioneering officials and agencies and he points out many of them.

As in other parts of URS's work, we did not have the time nor the resources to do an exhaustive job in this area. Rather we have sampled the experience and innovations knowing that we would miss some useful facts and might seem to ignore some valuable contributions. For instance, a complete investigation of the subject of Mr. Slayton's chapter ii certainly would have included the work in Memphis, Los Angeles, and St. Louis, and probably that in some other cities as well.

During much of his work on this subject, Mr. Slayton was on the full-time staff of URS. Previously he had been with the Planning Division of the Board of Public Land Commissioners and Municipal Librarian in Milwaukee. He left URS in 1950 to join the field staff of the Division of Slum Clearance and Urban Redevelopment, HHFA, and is now Assistant Director of the National Association of Housing Officials.

C. W.

CHAPTER I

BALANCED REDEVELOPMENT

INTRODUCTION

THE growth of American cities and metropolitan areas has created complex problems in municipal regulation and control of land use and development. The simple regulatory measures in common use at the turn of the century simply would not meet present-day needs. New forms or types of regulation have been devised; older ones have been revised both in substantive content and administrative procedure. Most of these controls, both old and new, are based on police power, i.e., the power of a municipality to protect and maintain on behalf of a local community the safety, welfare, and health of its inhabitants. Examples of the police power are familiar to nearly everyone—the abatement of nuisances, building codes, zoning ordinances, fire regulations, health and sanitation codes. Every city has some of them; most sizable cities have most of them. The method and effectiveness of their administration, however, vary greatly from city to city.

In general both the content and administration of these police power measures leave much to be desired. Progress has been slow and uneven both as to content and administration. Their greatest weakness, however, seems to be a weakness in or lack of co-ordination. Few cities, it would seem, have learned that hit-or-miss administration of their various regulatory measures does not produce an effective attack upon the conditions and problems the codes and regulations are designed to remedy.

The purpose of this study is not to examine the content of the various police power measures. There is already a considerable literature on this subject. Rather, this study examines the major point of weakness just mentioned—their lack of focus or co-ordination. It is hardly an exaggeration to say that in most cities each department or bureau responsible for administration of a regulatory measure does so with little or no regard to the areas, methods, or contents of other related codes and ordinances. Often a bureau or department has little knowledge of, or interest in, the relation of its regulation to others being administered by other units of the same local government. The result is usually a confused citizenry and ineffective enforcement.

This sad condition becomes very apparent in the control and regula-

tion of conditions generally labeled as blight or slum. Most cities have had for many years laws authorizing the condemnation of structures that constitute an unmistakable hazard to their occupants and to the community. Other ordinances deal with sanitation and repair of dwellings. Nevertheless, because of the rapid and continued growth of urban areas plus the inadequate application of existing regulations, public agencies have had to devise other methods for attacking slum and blighted conditions head on. The most recent and most spectacular of these is that of acquiring the blighted areas, removing the structures, and writing down the cost of the land for disposition to a private or public developer. This operation has generally been labeled "urban redevelopment." This kind of attack is necessary in most major cities in the United States and in many smaller ones if the slum and blighted areas are to be removed more rapidly than they are created. Frequently, however, the drastic nature of this operation blinds one to the possibilities of attacking some of these conditions, preferably in their earlier stages, by co-ordinated administration of improved regulatory measures.

This is not to suggest that such an enforcement program would do away with the need to clear slum and blighted areas. The drastic measure is necessary, but the improved administration of regulations is just as necessary. In fact, the two complement each other. Co-ordinating the administration of regulations and improving their content could do much to slow down growth of many slums and blighted areas and, in addition, would measurably improve some areas that are not ready for the buy-and-demolish operation.

Although in practice this approach is not a simple one, it deserves serious study and experiment. It has already been tried in varying forms and degrees in several cities. Their experience should be valuable to others that wish to take a comprehensive approach to the task of eliminating those physical conditions that are a detriment to their communities. Such a comprehensive program should be called urban redevelopment, with the buy, demolish, and rebuild action as but one part—although an important part—of the whole. The emphasis should be on intelligent treatment of substandard conditions of buildings and neighborhoods wherever they may be in the city rather than a restricted, hit-or-miss operation under which a spot here and a few blocks there may be cleared and built.

A COMPREHENSIVE REDEVELOPMENT PROGRAM

The formulation of a comprehensive redevelopment plan falls naturally into several steps. The first is the preparation of a general plan for the community's growth and development. This is really a prereq-

uisite rather than a step in itself; it is the basis upon which the redevelopment plan is formulated. The general plan must be far enough advanced to serve as a real guide. Its most important element for this purpose is the allocation of land use. The method of treating any blighted or redevelopment area will depend to a considerable extent upon the use to which it should be put now or in the foreseeable future. It is clearly impossible to formulate a valid redevelopment plan without having a reasonably thorough land use plan. For example, it is obviously a waste of money to rehabilitate an area if the general plan calls for a school or park within a few years. Again, a housing area slated for early industrial development should not be rehabilitated. In short, a comprehensive redevelopment program must be formulated with full knowledge of the general community or locality plan, and when it is formulated it becomes an additional element in the general plan. Finally, urban planning in all its phases is a continuing process. No part of a general plan is properly considered as fixed and unchangeable.

CLASSIFICATION OF AREAS

An important part, for our purposes here probably the most important part of a comprehensive redevelopment plan is classification of the entire city area in terms of the kind of treatment or program, if any, required in each subarea or district in order to make it suitable for its indicated use.¹ This classification must be based upon more than casual observation. Ordinarily these districts are named after the principal type of action needed in each, e.g., clearance or rehabilitation areas. It should be recognized, however, that the names or labels indicate only the predominant type of remedial treatment. As a matter of fact, several kinds of remedial treatment often may be needed in one area.

CLEARANCE AREAS

One of the first jobs is to select those areas that are suitable for clearance only. They will contain a very large proportion of structures in such poor condition that the only practicable treatment is demolition. As far as possible, the boundaries of each area should permit the treatment of it as an entity rather than as a group of blocks more or less arbitrarily plucked from the city.

AREA REHABILITATION

The second major class of areas in a redevelopment plan is those calling for area rehabilitation.² This is a very broad category since the

1. See Allan A. Twichell's discussion elsewhere in this volume.

2. The rather broad and shifting uses of the term "rehabilitation" in the literature have been confusing. At one extreme "rehabilitation" has been used to mean slum

degree and extent of rehabilitation may vary widely. Some rehabilitation areas may include many structures that will have to be demolished; other areas may contain only a few in this condition. Some structures may require almost complete rebuilding; others may need but relatively slight alterations.

Basically, the difference between rehabilitation areas and clearance areas is the extent of the clearance required and the extent of the changes made in the pattern of the area. A clearance area should have nearly all or, at least, a large proportion of the structures in it demolished. Even in the most extreme rehabilitation areas, on the other hand, although many buildings will be cleared and some new building may take place, a substantial proportion of the existing structures will remain.

The new land-use pattern of a clearance area will most frequently be different from its former layout. With some concessions to the location of existing utilities, the city has the opportunity to rearrange the pattern of streets and other uses so that it conforms to modern needs and preferences. In a rehabilitation area, however, the city must work pretty much within the pattern in existence at the time the rehabilitation operation is begun and, as a result, continue in use for another generation or more an arrangement of buildings and open spaces that is more or less obsolete. This consideration may influence a city to clear an area that otherwise would be considered suitable for rehabilitation.

In rehabilitation areas the public agency's main job is to acquire land and buildings, either to do the rehabilitation itself and sell the structures, or to sell the buildings to those who agree to handle the rehabilitation. This operation is supplemented by (a) the enforcement of police power measures to make sure that those structures that do not have to be rehabilitated are brought up to minimum standards, and (b) the demolition of those buildings that are not worth rehabilitating or that must be cleared in order to make the rehabilitation area a more

clearance and rebuilding and at the other, all kinds of repairs and remodeling of buildings as a result of police power enforcement. For the purposes of this explanation it seems wise to give the term a more precise meaning and to use another term for the action that occurs when an owner is required to improve his property because of police power enforcement. A term not much used to date but that would seem applicable is "reconditioning." Here, therefore, "rehabilitation" is used to mean only "area rehabilitation," an operation involving remodeling and replanning of an area so that it becomes substantially better than it was. The structures are remodeled to provide more than that required by the minimum standards of police power ordinances. Often but not always changes are also made in the land use pattern, e.g., more play space or enlarged parking areas. "Reconditioning" applies only to the improvement resulting from police power enforcement even though the administration of these police power measures may be on an area basis. Thus the Baltimore Plan is a reconditioning operation, not a rehabilitation operation.

desirable one. Demolition may be carried out either through enforcement of police power measures or after direct purchase of the properties.

In actual practice, the true rehabilitation area as defined here may not play too large a part in the comprehensive redevelopment plans of many cities. The cost of extensive rehabilitation will certainly approach that of clearance and rebuilding, and the added benefits of completely remaking an area will frequently outweigh the cost differential. In addition, the process is not well known and is much less sure cost-wise than is a clearance operation. With more experience in its operation, however, it may prove a more widely effective device than it now promises to be. Meanwhile, areas that might be classified for area rehabilitation probably will be put into either the clearance or enforcement categories.

ENFORCEMENT AREAS

Enforcement areas are those in which the city will concentrate on a vigorous application of police power measures rather than on a clearance or rehabilitation program. The tools employed are those that nearly every city already possesses in some form or other, e.g., zoning ordinances, fire prevention measures, building, electrical, plumbing and sanitation codes, and abatement of nuisances. The one police power measure useful here that most cities have not acquired is the housing code. It will be discussed later in this chapter.

In one sense, enforcement areas may be looked upon as residual areas after the clearance and rehabilitation areas have been marked out. They usually cover much of the city, and the quality of housing and environmental conditions in them ranges from poor to very good. In them the police power measures can prove most effective and should receive their most intensive use. The degree or intensity of enforcement work, however, will vary greatly within these large areas. Naturally the worst parts will receive intensive inspection while the good areas will need only an occasional checking to see that maintenance is not slipping.

Many cities have begun active clearance and rebuilding programs now that federal loans, subsidies, and other assistance are available to them, but few have made effective use of the powers that have been theirs for many years to improve substantially the large areas within their limits that are in relatively poor condition but do not yet need to be cleared or rehabilitated. Eventually these areas may have to be cleared, but the date of their clearance can be postponed and their condition during this interim period can be materially improved if the city applies the police power measures that it has at hand. Of course, an en-

forcement program does not have the glamour of a clearance operation nor are the results as striking as the demolition of slums and the construction of new buildings. In providing and maintaining decent living conditions, however, an enforcement program can have an effect on far more structures and can benefit many more people than clearance or rehabilitation operations for many years to come.

There has been a tendency—in fact, in some quarters, a deliberate campaign—to make enforcement programs appear as substitutes for clearance and rebuilding. Some of those who oppose public housing and slum clearance operations maintain that an enforcement program in slum areas is an economical means of providing those who live in such areas with decent living conditions. This contention ignores the limitations of an enforcement program. It is in no way a substitute for clearance or major rehabilitation. Enforcement cannot make housing that is basically bad into good housing. It can remove some of the trappings of slums such as the accumulated trash and rubbish, the rickety back stairs, the outside toilets, but it cannot remake slums into housing that will meet present-day standards of livability. Further, where owners of slum areas are required to make the buildings somewhat more habitable, a sizable additional investment may have to be sunk in them. If they are to realize on this investment, they often must increase rents and this, in turn, will force at least some of those who live in the area and are unable to afford higher rents to seek quarters elsewhere. Such quarters are almost certain to be in the slum category unless public housing is provided. An enforcement program in slum areas does not of itself create any additional housing nor does it necessarily encourage housing for low-income families.

There is, however, a place for a limited enforcement program in clearance and rehabilitation areas. Until an area actually is cleared, it should be kept as clean and safe as possible. If there is to be a considerable time before an area is to be cleared, then those defects in existing buildings that endanger the health and safety of the residents should be made good. For example, the worst accumulations of dirt can be removed, the back steps can be repaired, but no major capital improvements should be required. In many rehabilitation areas, there will be some structures that do not need to be purchased and fixed up. These should be carefully inspected and necessary orders issued to bring them up to the city's minimum standards. But enforcement in such areas, although an essential part of a comprehensive redevelopment program, is considerably different from the program that should be administered in enforcement areas.

Useful subclassifications of the large enforcement area classification are: reconditioning districts, conservation districts, and growth dis-

tricts. They are called "districts" in order to prevent confusion with the major classifications called "areas."

Reconditioning districts are those in which the enforcement program is most intensively used. They are characterized by rather old structures that are not too far from the slum category. The buildings are below the standards established by the police power ordinances, environmental conditions usually are bad, and if left alone, the district would in all likelihood slip quickly into the slum class. On the other hand, the structures themselves are too good to be demolished; the investment of a relatively small amount of capital will bring them up to minimum standards, but may not create fully desirable housing.

Conservation districts are basically stable and basically good for the housing and other purposes they are serving. The age of structures in such districts is considerably less on the whole than that of the buildings in reconditioning districts. They are basically sound districts that have only a few spots of blight or only a relatively few structures below the minimum standards. The older parts of these districts are usually ripe for conversion, alterations, or remodeling, and in this regard it is important that the building code and zoning ordinance be strictly enforced.

Growth districts are those in which the structures are quite new. Substantial amounts of vacant land exist and, as the name indicates, the district is in the process of developing. Enforcement in such districts is almost exclusively of the building code and zoning ordinance. Occasionally there may be some need to enforce maintenance provisions, but that is the exception rather than the rule. These districts are very close to open land districts which are discussed later.

One of the biggest problems confronting a city embarking upon an enforcement program, particularly in reconditioning areas, is the size of the job itself. Enforcement is not a speedy process. It requires time to cover a district thoroughly. The city, therefore, must make some decisions as to priorities even before it starts its program. It seems clear that the place to start usually is in the worst of the reconditioning districts.

No city should make the mistake of undertaking an enforcement program on the basis of scattered inspections; the only effective way to go at a program is to concentrate enforcement in one (or a few) areas at a time until they meet the minimum requirements. Enforcement on a complaint basis spreads the effect over a very wide area, and the result is that no one district really benefits materially. This is not to say that complaint enforcement should be abandoned in favor of concentrated area enforcement. The city still has a responsibility to correct all violations brought to its attention or discovered in the

course of its other operations. Complaint enforcement should be continued or perhaps even strengthened, but the activities of those inspectors who seek out violations should be concentrated for the most part in but one area at a time if the greatest possible results are to be achieved from an enforcement program. This kind of operation is referred to here as "area enforcement."

The purpose of an enforcement program, of course, is the prevention of slum and blighted conditions wherever possible. No city can overcome obsolescence without rehabilitation, clearance, and rebuilding. Eventually every structure will outlive its usefulness and have to be demolished. The length of time that it will take most structures to reach this point, however, can be increased considerably if their owners are required to maintain them so that they meet certain minimum standards. One reason that some areas slide so easily into the slum category is that a few of the houses in them are allowed to deteriorate and the area soon assumes its character from these few. The owners of the other houses are given no incentive to maintain their property properly, and the appearance of the area does not attract people to it. This kind of disintegration need not occur. Much of the older areas of a city, though certainly not as attractive as some of the newer districts, can be maintained in a condition that will keep them out of the slum and blighted category for a long time. An enforcement program, therefore, is in effect a capital-preserving program. It is designed to make longer use of the city's structures—an important item in its capital.

PREDOMINANTLY OPEN AND OPEN AREAS

Two other types of areas in a comprehensive redevelopment plan should be mentioned—open and predominantly open areas.

Predominantly open areas are not as much with us as they once were. They have been used up for the most part in the recent housing boom. A few such areas remain, however, in nearly every city, and they need special consideration. They are areas that have been platted and usually improved with streets and at least some utilities, but that have not developed. Perhaps only a few houses stand upon the subdivision or perhaps it is completely vacant. Good examples of this kind of area are on the fringes of Chicago where one can see large districts complete with streets and street lights but only an occasional three-story walk-up that is all but isolated. The surrounding lots have never been developed. Most of the area is tax delinquent and ownership is often obscure. If these areas were on the edge of the city with no built-up land beyond them, they would not be so astonishing, but the fact is that right next to them one can find completely developed areas. These

spots (some of them with hundreds of acres) have been by-passed by the builders because of the difficulty of acquiring the land, in some cases because of the blighting influences of the existing buildings constructed years ago, and the obsolete platting with its small narrow lots and wasteful street pattern.

Clearly these areas represent an economic waste to the city. The extension of utility lines beyond them to serve new areas, the necessity of maintaining police and fire protection for them and the areas beyond are costly to the city. The situation is costly to many residents as well because it means that they must go that much farther from the city in order to find a place to live. It is only common sense that some action be taken to make use of these areas.

The task, however, is beyond the private developer's resources and methods of operation. He has not the means to acquire all of an area because of the diversity of ownership and the involved tax situation on most of the lots. The only feasible solution is for the locality to undertake the job itself, and the redevelopment of such areas becomes part of the redevelopment plan of the city or metropolitan area. The procedure in such areas is much like that of clearance areas except that there is little if any actual demolition involved. The municipality or its public agency can usually replat the area and rearrange the street pattern at least enough to provide an acceptable subdivision. One advantage in developing such areas, of course, lies in the existing utilities, and they should be used wherever feasible.

Some of these areas may be quite small, but their size should not be an excuse for neglecting them. Nearly every city has a few such areas, and they should be identified in some fashion in the redevelopment plan. Proposals should be prepared for their eventual development and a time schedule established for carrying out the plans.

An open area has usually not been platted and certainly has not been improved with streets and utilities. It is, in effect, raw land awaiting development. This is the way cities have grown in the past and the way they can be expected to grow in the future. Cities have taken cognizance of these developments, however, by requiring that they meet certain basic subdivision standards. This does give the city some negative control, but it does not permit the city to influence materially the way and rate at which the growth will take place.

Naturally one is not likely to find open areas within the limits of a large city, although some cities have expanded their boundaries so rapidly that they still contain large areas of undeveloped land. But the problems of redevelopment are not limited by the boundaries of a city. The political boundaries do not coincide with the areas of related set-

tlement, and a city should be concerned with the developments on its outskirts as well as with the redevelopment of areas within the city proper.

The development of this open land should be an integral part of the redevelopment plan of the city, for the nature of its future growth is as important to the city as is the rebuilding of existing slum and blighted areas. In fact, intelligent attention to future growth will reduce its problems of redevelopment in the years to come. At first glance, some persons may say that for the city itself to engage in an open-land development program would be a questionable policy—maybe even an unnecessary move into an operation traditionally done by private, speculative enterprise. On the other hand, the public stake in good land subdivision is great. It cannot be denied that much subdivision in the past has been crudely, wastefully, and poorly done. And, as a matter of fact, many, perhaps most builders of today are interested in subdividing largely as a necessary way of getting lots to build on. If they could be provided with improved land in a good subdivision that was well protected from encroachment by undesirable, nonresidential uses and well provided with community facilities, they would be happy to take it up.

REGULATORY TOOLS

For the purpose of this discussion, it is not necessary to go into the content of the police power measures affecting urban development. Because the emphasis here is on their co-ordination and administration, it is necessary only to describe them sufficiently to indicate the roles they can play in a comprehensive enforcement program. Brief sketches of their provisions are used only for illustrative purposes. A partial exception to this is the housing code. Its relative newness and its importance in a comprehensive enforcement program require that more information be given on it.

This, of course, does not mean that the content of other police power measures is not important. Neither does it imply that the substantive provisions of these measures in most cities are satisfactory.

BUILDING CODE

A building code consists of a set of specifications or standards that a builder must observe when erecting a structure. He is required to have footings of a certain size, walls of certain materials or thicknesses, or vents for the bathrooms. Or, under more recent performance codes, so-called, he must make certain walls so that they resist fire for a specified period of time or put on roofs that will support a given weight or thickness of snow. The code provisions usually are quite detailed.

This code ordinarily applies to all new construction and all alterations or conversions. It is enforced by requiring the builder to obtain a permit before starting construction. Before a permit is issued, he must show his plans to secure the approval of the enforcing agency, usually the building department. In addition, the building department maintains inspectors who check the construction during various stages. Many building codes also include provisions permitting the ordering of demolition, closing, or repair of those structures that endanger the safety of the occupants or others.

ZONING ORDINANCE

Very briefly, a zoning ordinance determines the use of various areas of the city-residential, commercial, and industrial uses variously defined. It determines, directly or indirectly, the maximum density in residential areas; it determines the maximum height of structures in any area. It tells the prospective builder where he may build and the kind of structure he may put up.

Its primary function in a comprehensive redevelopment program is that of helping to assure the proper development of new areas and the proper redevelopment of old areas. A slum or blighted area is not created by the conditions of the structures alone. Inadequate open space, various mixtures of uses can make an area a slum as surely as deteriorated buildings. Good buildings in an improper arrangement and environment will not keep an area from degenerating into a condition of blight; the structures must be arranged in such a way that they will provide a proper environment for the uses to which they are to be put.

Co-ordinating enforcement of the zoning ordinance with that for the building code is usually not a difficult task because frequently the two are in the hands of the same official. When a builder applies for a permit to erect a building, he must have his plans approved to see that they comply with the zoning ordinance as well as with the building code. The building inspectors can check on whether the builder is actually observing the zoning ordinance.

FIRE PREVENTION

Fire inspection is frequently confined to the central areas and to such structures as theaters and department stores to see that they do not violate the fire prevention ordinance. Some cities extend inspection to the outlying residential areas as well, but they are fairly few. Inspections in outlying areas are rarely on an area basis but limited generally to complaints of citizens who have observed conditions that might easily cause a fire. Thus the fire inspection program as it now operates does not contribute a great deal to a comprehensive enforce-

ment program. This does not mean that it cannot add to the effectiveness of such a program, for it is clear that the removal of accumulated combustible material as well as other safeguards against fire result in the improvement of the structure and the area in which it is located.

HEALTH AND SANITATION

This is a very wide field, ranging from the inspection of beer glasses in taverns for bacteria count to exterminating rats at the city dump. The range of enforcement among cities is correspondingly great. The parts of the health and sanitation program that are important segments of a comprehensive enforcement program are those relating to the maintenance of a healthful and sanitary environment throughout the city. This covers such items as the proper disposal of sewage, the elimination of accumulated rubbish and garbage, extermination of rats and elimination of conditions that attract them, the elimination of unhealthful and unsanitary conditions in residences. The importance of these and similar regulations to the improvement of environmental and living conditions throughout the city is beyond question. They are a necessary part of a comprehensive program.

SUBDIVISION REGULATION

Subdivision regulations, although on the fringe of a comprehensive enforcement program, are important to it in some respects. They have no application in the built-up areas of the city, but apply only to the two extremes—clearance areas and undeveloped areas. Their importance to a comprehensive redevelopment program is the same as the zoning ordinance in newly developed areas. A competent set of subdivision regulations that are enforced assures the city that future developments, either on raw land or in clearance areas, will not deteriorate because of unwise layout. The streets will be of adequate width and will be so arranged that through traffic in residential areas will be minimized and the lots provided with as good a setting as possible. Many of the areas that are now considered blighted could have been maintained as relatively desirable, even with their structures of considerable age, had they been built under a good zoning ordinance and subdivision regulations.

MINIMUM HOUSING STANDARDS CODE

In the ordinances and regulations just referred to, municipal departments are given control over new construction, over conversions and alterations, over the use of land, the placing of structures upon the land, layout of new developments, and upon existing environmental conditions as they affect health and sanitation. The combination of

these measures, plus the rehabilitation and clearance programs, give the city very considerable power to provide decent living and working conditions for its residents. There is, however, a large gap. Nowhere in the measures listed is there the power to require existing dwellings to meet minimum housing standards. Once a structure is built and so long as it is kept in a reasonable state of repair and does not create an unmistakable health or sanitation menace, it can continue to exist even though its accommodations are considerably below what most informed opinion would regard as minimum.

The relative importance of some type of regulation over existing housing as against new building is strikingly indicated by the fact that the number of new dwelling units constructed each year constitutes, on the average, some 2 per cent of the total housing supply in existence. The building code has long been stressed as an essential measure to assure the proper kind of building, but relatively little attention has been paid, until recently, to the equally urgent and larger problem of requiring that existing structures also be adequate.

Another way in which existing dwellings can rapidly become slums is through overoccupancy, i.e., the use of dwelling units to house many more people or families than the quarters were originally intended to accommodate. This type of slum often does not have the appearance of the slums as most people think of them, but the results are almost, if not fully, as bad.

This gap in police power protection has been recognized by several cities and has been filled by what is generally known as the housing code. It requires that all housing, regardless of when built, meet certain minimum standards—standards relating to space, facilities, and occupancy. These minimum standards are not high. Even so, they constitute one of the most important tools in a comprehensive redevelopment program, and the city that does not have such authority is limited in the kind of program it can undertake.

THE ENFORCEMENT PROGRAM

In what has gone before, the phrase "enforcement program" has been used in a general or generic sense. Now it should be examined rather more carefully. Also, before taking up in chapter ii the experience of four cities that are pioneering or, at least, are trying to improve the over-all effectiveness of their regulatory activities on housing and development, a recapitulation of the elements of an enforcement program seems in order.

An effective enforcement program consists of three kinds of operation: area enforcement, complaint referral enforcement, and permit

enforcement. The first of these is by far the most significant for urban redevelopment. In fact, the other two, although useful and desirable operations, have only a weak and incidental relation to redevelopment.

Area enforcement is the focusing, co-ordinating or concentrating of all pertinent regulatory measures on an area or series of areas. Typically these areas show definite signs of blight and deterioration and are, so to speak, on the brink of a serious decline (reconditioning districts) or, although in fairly good condition and fairly stable, show a few signs of incipient blight (conservation districts). By various means, which will be discussed later, a thorough, vigorous effort is made to realize in the area or areas all the benefits of the police power measures. As a part of redevelopment, this is in one sense preventive medicine. It is an attempt to slow down, stop, or postpone the blighting process. In another sense, it is a step to induce a rather limited renewal or redevelopment of existing buildings rather than of cleared land. Quite often area enforcement is used almost synonymously with an enforcement *program*.

The second operation or element is complaint referral enforcement. This operation employs the same enforcement tools as area enforcement, but it differs from it in two respects. Enforcement is not concentrated on an area. It is in response to reported (referral) violations throughout the city either by citizens or members of other municipal departments. The second difference is that complaint referral enforcement is departmental enforcement—action in accord with individual codes and ordinances by the department that has the primary authority for administering them. The fact that department inspectors may be assigned to physical areas for their work does not make it area enforcement as the term is used here.

The third kind of enforcement is best labeled "permit enforcement." It is the routine enforcement of such regulations as the building code, the zoning ordinance, and subdivision regulations.

One hazard of an enforcement program is that too much may be expected of it. Making effective minimal standards does not produce really good housing. It produces only minimal housing and no more unless the owners decide to do more than the law requires. It does improve the housing, but it does not make an old area that is on the downgrade into a desirable residential area. Furthermore, it does not change the appearance of the area much. The rubbish is gone, perhaps some homes have been painted because of the enforcement program, and some repairs have been made. But the houses still have their same shape; they are still of the same age; and the lots are still as narrow or as shallow as before. They will, however, provide considerably better living conditions.

AREA REHABILITATION AGAIN

Finally, area rehabilitation may deserve some further comments at the end of this chapter. Certainly additional discussion of this phase of redevelopment is not justified by its position in current thinking nor by the likely volume of such activity in the near future. Rather, it comes from the fact that undertakings of this kind are few and experimental and, consequently, both their possibilities and limitations have been little explored.

When a redevelopment agency is considering a possible rehabilitation area, the choice of what should be done in the area will usually be between clearance and rehabilitation. And often the decision will be based primarily upon the cost estimates for the two operations. This is the key question, and unfortunately little experience is at hand to guide a community in determining what the costs of rehabilitation will be. Otherwise the question resolves itself into a rather simple one: Is the difference in cost between clearance and rebuilding, on the one hand, and rehabilitation, on the other, sufficient to warrant the continued use of old structures within the limits of the present street pattern? This assumes, of course, that the cost of clearance and rebuilding will always be greater than the cost of rehabilitation. If it is the same or less, then, except in unusual circumstances, rehabilitation need not even be considered.

Area rehabilitation has two very grave disadvantages. The first is in the limiting effects of the existing street pattern, the other obviously the old buildings themselves. Although they may be structurally sound, they do not have the appearance, character, or amenities of modern structures. Quite often, of course, the comparison would favor the old buildings—at least on many points, including quality of construction. But in general the older structures are not as desirable in design nor amenities as the newer ones. A rehabilitation program aims at redoing old structures so that their life is extended another thirty years or so. Unless a building structure is a historic one (and then it is really not part of this problem) it may not wear as well in terms of community reaction and acceptance over the next thirty years or more as would a new structure.

One other criterion that the redevelopment agency must consider in making the rehabilitation vs. clearance decision is the anticipated use of the area some twenty-five or thirty years hence. This comes more or less under the heading of crystal-ball gazing, but it is a consideration nevertheless and one that sometimes may tip the balance toward rehabilitation. If one assumes that the life of a clearance project will be considerably longer than that of a rehabilitation job and, therefore,

that new buildings would be more expensive to acquire within the next 30 years than a rehabilitation project, that the future use of the area within some such period may well be a park, a public building, a railroad station, industrial site, or some other nonresidential use, and that the city or some other agency may have to acquire and prepare it for that use, then it does make sense to treat the area now by the method that costs less initially and that entails less cost if and when the area must be reacquired. This obviously is a tenuous argument for area rehabilitation, but in some circumstances it may be pertinent.

One other line of analysis, although equally inconclusive in the absence of more facts, is worth outlining now. The relative desirability of these two kinds of projects should not be measured solely in terms of their physical attractiveness but as to which project will best serve the needs of the community. Here the rehabilitation program may have one of its strongest arguments: the possibility that area rehabilitation could be, in some circumstances in some localities, a means of meeting the need for decent housing for families in the lower-middle income groups. More good dwellings for families in these groups is one of today's most acute housing needs.

Public housing takes care of many in the lowest- or next to lowest-income groups, but those just above the admissible income levels have to live in low-rent and low sales price housing on the private market. Much of this housing could not be classified as decent, safe, and sanitary—let alone as pleasant, comfortable, and livable. Many of the families in these income groups live in blighted areas. The filter-down process has not provided them with acceptable housing at rents they can afford to pay. The low volume of house building during the depression and World War II helped to create a housing shortage that the boom postwar years have not filled. Some housing that ordinarily might have been torn down has continued to exist. Blighted areas have grown larger instead of smaller, and housing in them continues to be in demand; it is most of the privately owned, low-rent housing available.

So far there has been no solution to this problem. No one advocates that good housing not be provided for these people at rents within their means, but neither new nor decent used housing is on the market in quantity at prices families in these groups can afford to pay. Rehabilitated housing may hold the possibility of filling some of this gap.

No figures on rehabilitation are at hand that demonstrate that it can do this job, but certainly the possibility deserves careful exploration. If old, but structurally sound, buildings can be acquired at relatively low prices and relatively modest sums expended on their rehabilitation to provide decent living and neighborhood accommodations, then such accommodations *could* be rented or sold at prices within the means of

the groups just above the public housing income limits. Certainly the return from many slum properties today is much greater than the true value of the present structures warrants, and if the rents for rehabilitated buildings were based on a reasonable return, they might well be within the means of at least some of those who cannot afford decent housing at today's costs.

The local subsidy involved, if it should be called a subsidy, would be the money spent by the city in preparing the area for rehabilitation, fixing up the streets, providing the needed community facilities, etc. These expenditures, it can be argued very easily, would or should be made in any case, and can hardly be classed as a subsidy to the rehabilitated dwellings.

If this should prove to be a possibility, then it may well outweigh all considerations that persuade some redevelopment agencies to go the clearance route exclusively rather than the rehabilitation route as well.

All of this adds up to a lack of definitive criteria for use in deciding whether an area should be cleared and rebuilt or rehabilitated. There obviously is no pat formula because of the complexity of the questions involved and because of the lack of experience in area rehabilitation operations. About all a public agency can do is to estimate all the costs, assess the unmeasurable items as best it can, and come out with what seems to be the best course for the community in each area. A few brave agencies that are both willing and legally empowered to undertake area rehabilitation would be rendering all communities a real service if they would undertake a few projects of this kind and report on them in some detail.

CHAPTER II

EXPERIENCE WITH POLICE POWER REGULATION OF HOUSING IN FOUR CITIES

NO CITY has in operation a program that combines all the elements of a comprehensive redevelopment plan described in the previous chapter. Neither does any city undertake its police power regulation of development and housing in ways that incorporate all the elements of a comprehensive enforcement program suggested earlier. Some cities, however, have taken steps in these directions. Their experience can be analyzed as to the effectiveness of the administrative techniques employed; and from it, perhaps, some tentative, general recommendations can be made on the best way to undertake a comprehensive enforcement program.

Quite a number of cities have attempted a program of some sort, but it is impossible to go into the experience of all of them here. A selection had to be made. Without any reflection on excellent work being done elsewhere, the four cities selected as examples of particular aspects of enforcement activity are Baltimore, Milwaukee, Kansas City, and Chicago.

THE BALTIMORE PLAN

More effective enforcement of controls over the use of land suggests immediately the "Baltimore Plan," the program of intensive law enforcement to clean up the slums. Unfortunately, the Baltimore Plan has been seized upon by opponents of public housing, clearance, and rebuilding as the type of program that can make these measures unnecessary. Because of this championing of the Plan and because it has been represented as accomplishing a great deal more than it has done or was designed to do, it has come to be looked upon with some suspicion by many of those interested in urban redevelopment.

A review of the Baltimore Plan shows that it is one of the earlier attempts to enforce police power measures on a concentrated area basis rather than as a scattered, result-of-complaint type of operation. Within limits the attempt has been effective and so far its results have been commendable. Actually, however, it is only a start on a really

comprehensive enforcement program. As it is described in more detail, its limitations will become evident.

Officials responsible for the Baltimore Plan have been quick to emphasize its limitations and to refute those who make sweeping and often ridiculous claims for it. An editorial in *The Evening Sun* points out the limitations very succinctly:

. . . Despite its accomplishments and potentialities, the law enforcement effort, no matter how vigorously and on how large a scale it is carried out, cannot by itself solve the problems which bad housing spawns. It can improve bad housing, but it cannot transform it into good housing. It is more a health than a housing measure. It cannot eliminate slums, although it can bring more light and cleanliness to them.

Law enforcement is an essential part of an attack on bad housing and its attendant problems. But it would be a mistake for any community to turn to the Baltimore plan as a full remedy for its housing ills.¹

HISTORY

In 1939, the Health Department in co-operation with the city building engineer succeeded in having one of the worst blocks in the city demolished. From this experience and the support of a newspaper campaign to clean up the slums, it soon became apparent that a new and specialized health nuisance abatement law was needed to aid in such a program. Then:

In order to give the City Health Department the authority to develop an effective housing law enforcement program, an Ordinance on the Hygiene of Housing was carefully prepared and enacted. This received the approval of the Mayor on March 16, 1941. It included an all-important section that gave the city health authority power to adopt rules and regulations deemed necessary to make the enforcement of the ordinance effective "for the better protection of the health of the city." Both owner and tenant responsibilities for the maintenance of sanitary dwellings were included in the ordinance and in the regulations which were adopted and promulgated in 1942. The regulations were carefully drawn so as to provide a minimum standard for housing sanitation.²

The ordinance could not be enforced vigorously during the war, but experience gained then showed that enforcement was far more effective on an area basis rather than on a house here and another there. If area enforcement were used, no one could claim he was being singled out while his next door neighbor was not bothered, a common complaint against any law enforcement program of this kind.

A co-ordinating committee was set up in 1945 to bring together more effectively all city departments concerned with housing law enforce-

1. *The Evening Sun* (Baltimore), November 17, 1948.

2. Huntington Williams, M.D., commissioner of health, and Wilmer H. Schulze, Phar.D., director of the sanitary section, "Housing Law Enforcement and the City Health Department's Attack on Slums," *Baltimore Health News*, Baltimore City Health Department, Vol. XXV, No. 12 (December, 1948), pp. 82-83.

ment. There were fifteen members of the committee; but as it turned out, only the fire, building, and health departments actually sent their men into the area selected.

The committee chose one block in which to begin its area enforcement. A team of three inspectors, from the three departments named, inspected all houses in the block and issued correction orders on all violations discovered. These orders were sent to each owner at one time.

This method had two drawbacks. The first was that some owners became confused with orders for violations from three different departments. It meant they had to deal with three departments rather than being able to handle all violations with one agency. The second drawback was that the housing inspectors from the Health Department were able to cover more ground in a day than were the fire and building inspectors. It was decided, therefore, that the health inspectors should make the initial inspections and call in inspectors from the other two departments when conditions requiring their judgment were discovered.

This was the method of inspection adopted when the area of concentrated enforcement was enlarged to 308 blocks. This area was selected with the aid of the Baltimore Planning Commission, the Baltimore Redevelopment Commission, and the Housing Authority of Baltimore City.

In 1947, two changes were made in the enforcement program. One was the creation of a Housing Court—a special court on Tuesdays and Thursdays to handle only housing law violations. The success of this court has been one of the outstanding elements of the Baltimore Plan. All cases are before one magistrate and, as a result, they are handled with much greater dispatch and the laws are enforced more effectively than before. A series of stiff fines for owners who failed to comply with the regulations soon made property owners realize that correction orders were to be taken seriously. Recent cases, therefore, are primarily those involving disagreement over guilt or those that might be classified as hardship cases, i.e., where strict and prompt compliance would, because of poverty or other reason, create a hardship. The court has been of great value in strengthening the enforcement work of the departments. Although only the Health Department's housing division enforces on an area basis, the court is used by inspectors from all other departments—police, fire, building, etc.

The second change made in 1947 does not show such positive results. The mayor assigned sixteen policemen to a special housing enforcement bureau in the Police Department. The duty of these police inspectors is to go through their districts seeking out violations of vari-

ous ordinances. They have concentrated on cleaning up yards, ordering the removal of hoppers (outside flush toilets), and the repair of dilapidated houses. They do not exercise their authority in those areas in which the housing division of the Health Department is enforcing the hygiene of housing ordinance. They do work, however, in those areas that have been slated for redevelopment. This is not intentional; apparently the officers do not know that certain areas have been declared redevelopment areas.

A recent development in the program is the creation of a Housing Bureau in the Health Department (1951) and the appointment of a Citizens' Advisory Council to aid the commissioner of health and the director of the Bureau. The Bureau director serves as executive director of the Council, which advises on the areas to be worked and on housing enforcement policies.

This is a very compressed history of the Baltimore Plan. Its elements are (1) an ordinance on the hygiene of housing, (2) enforcement of this ordinance on a block-by-block area and project basis, (3) a special housing court to hear housing violations, (4) special police enforcement dealing primarily with abatement of nuisances, (5) citizen support coupled with an educational program, and (6) a public policy of co-ordination with the public housing and redevelopment agency programs. Its chief virtue is that it is the beginning of an area enforcement program to improve living conditions. Its drawback, other than its being represented by outsiders as more comprehensive than it is, lies in its present limited objective—concentration on “rock bottom” slum areas. It is only fair, however, to point out that the program was never designed as a really co-ordinated enforcement program.

ANALYSIS AND EVALUATION

It is quite apparent, as just indicated, that the Baltimore Plan is not co-ordinated enforcement of the city's police power measures in respect to housing, let alone as to all kinds of land use. The area enforcement program involves only the Health Department and, even in the Health Department, only the housing bureau carries out the area enforcement idea. Other inspectional services of the Health Department continue as before. For example, in one instance the rodent control inspectors brought a property owner into court after he had fixed up his houses in compliance with the housing inspector's orders. This would not happen were the housing inspectors able to enforce more than just the hygiene of housing ordinance. There is co-ordination to the extent that the Housing Bureau calls upon other departments when other than housing code violations appear, and in that housing law enforcement is not pushed in areas scheduled for clearance and rebuilding. But there is

not yet a completely systematic means for tying together the enforcement of all ordinances regulating land use and structures in the areas chosen for intensive inspection.

Although the program is not fully co-ordinated area enforcement, there are some elements of teamwork between other departments and the Health Department's Housing Bureau. The building engineer's office, for example, requires the approval of the Housing Bureau before a permit is issued for the alteration of a building. This prevents expenditures for capital improvements that might violate the hygiene of housing ordinance.

Another example involves the sale of tax-delinquent land. The former practice was to sell tax delinquent land without consulting the Health Department with the result that some structures were sold that did not meet the Department's standards and that should have been demolished. When this happened, the purchaser could present a good case for resisting an order to demolish his recently purchased building. Now, however, the comptroller will not sell any tax-delinquent property without consulting the Health Department first to see if the structure should be torn down. In addition, the comptroller consults the Redevelopment Commission to be sure it does not wish to acquire the property for redevelopment purposes.

The Police Department, however, continues its activities, referred to above, on a city-wide basis, co-operating with other departments only to the extent of steering clear of housing code enforcement areas.

Another limitation of the program is that it is primarily an attack upon, in the words of the Health Commissioner, "rock bottom slums." "Experience in Baltimore during the past decade has demonstrated that by law enforcement many existing slums in blighted areas may be made habitable even though the results accomplished do not turn these worn out houses into a state of real decency."³ Thus the program is not designed as an all-out enforcement program but is directed at making the slums livable. An editorial in *The Sun* confirms this recognition of the limited objective of the program:

. . . Baltimore's housing law enforcement drive is an excellent one and deserves wide recognition. The city can blush with fitting pride at the publicity given its efforts by the home builders. But no one should assume that Baltimore is doing anything more than making a few dilapidated buildings a little more inhabitable. Housing-law enforcement is not slum clearance, and nothing will make it so.⁴

The work of the Housing Bureau in the Health Department has been effective. Actually, cleaning up the slums has meant more than tearing down fences and clearing rubbish. If a building is unfit for human hab-

3. *Ibid.*, p. 82.

4. *The Sun* (Baltimore), April 22, 1948.

itation, it is so placarded; and the tenants, if any, are required to vacate. Closing such a house usually results in its demolition, since the work required to make it habitable usually exceeds the worth of the building. The program, therefore, does result in some demolition. It is not just a clean-up façade that represents no basic change. It gets rid of the very worst housing in the slum areas where the hygiene of housing ordinance is being enforced.

The director of the Housing Bureau has recognized that this type of program, effective as it is in achieving its limited objectives, is insufficient. He has plans afoot to bring more agencies into a housing enforcement area. He feels that the problem of improving an area goes beyond the buildings and yards, that it should include moves to stimulate interest among residents in the area to help themselves. He has selected a thirty-block area for concentrated enforcement supplemented with a concentrated special work program. He has asked for a full-time public health nurse, a full-time social worker, and the help of a school principal and of the city recreation department to work with the people in the area. His intent is to stir up the people to take an interest in the area, to do what they can collectively to make it a better place in which to live.

Certainly, by and large, too little attention has been given to the people themselves in such areas, the apparent assumption being that physical betterment is the primary or maybe the only real problem. Co-ordination, it would seem, should go beyond the controls over land use and development and should include all social agencies, public and private, that have dealings with the people in the area. Other phases of this subject have been dealt with in another part of this Study—"Urban Redevelopment and the Urbanite."

An example of how the new Health Department's Housing Bureau already utilizes the social agencies in an area enforcement program is its relocation work. Placarding a house as unfit for human habitation and requiring the tenants to leave is almost impossible in the present housing shortage. The Bureau, therefore, must help in the rehousing of such tenants. To do this single-handed would burden the Bureau with a delicate and difficult task and also would duplicate services already available. Therefore, the Bureau works very closely with the City Welfare Department where families on relief are involved, and with the Housing Authority and the Council of Social Agencies for other families. The agencies have been of great aid in finding houses for these displaced people.

One reason the Health Department has not pushed its objectives further is that it has found it impracticable to enlarge the scope of effort of the hygiene of housing ordinance. Most slum dwellings could

not be changed to meet more stringent requirements without an expense greater than the condition of the building warrants. Thus, there can be no requirement of bathing facilities for a certain number of occupants; most of the slum houses have no room to instal such facilities. Also, enforcement has been limited chiefly to single family houses; the multiple family structures will be much more difficult to deal with.

In short, there have been only limited changes in the enforcement areas. The commendable objectives of cleaning up the filth, tearing down the rat-harboring, collapsing fences, and vacating totally unfit dwellings are being accomplished, and these basically were the nuisance abatement goals of the Baltimore Plan. In the words of Baltimore's mayor, Thomas D'Alesandro: "The program is designed to relieve somewhat the worst slum conditions until such time as the slums can be torn down and satisfactory housing supplied."⁵ On a rather limited but expanding scale, it is an example of what area enforcement can do, but it also shows what further steps need to be taken if co-ordinated enforcement is to become a real force in the redevelopment of cities.

One final weakness: other than the designation of redevelopment areas, no statement of policy has been made that could guide agencies in all or most of their enforcement work. There is no policy on the degree or intensity of enforcement by areas. A reasonably firm indication by the Planning Commission of future land uses by areas of the city and of the desirable development of each area would aid all departments as well as those concerned with the enforcement program. The absence of such a policy or plan, however, is not peculiar to Baltimore; it is nearly universal.

SUMMARY

Baltimore's contributions to enforcement methods are basically three: an ordinance on the hygiene of housing, area enforcement, and the housing court. Unfortunately, complete co-ordination of enforcement among the various enforcing agencies has not yet been achieved under the Baltimore Plan and enforcement has been aimed chiefly at making basically uninhabitable, worn-out buildings sanitary. It has not yet taken the next step—encouraging or fostering rehabilitation in those structures that are basically sound and need only limited reconditioning or good maintenance to make them acceptable dwelling units. Nonetheless, the Baltimore effort is only twelve years old and shows signs of an approaching vigorous adolescence. In addition, the Baltimore Plan has done much to awaken other cities to the need for more

5. Statement of Thomas D'Alesandro, Jr., Mayor of Baltimore City, before the House Banking and Currency Committee, May 6, 1949.

effective enforcement programs. It deserves much credit for its pioneer work.

MILWAUKEE

Milwaukee's program parallels Baltimore's in that it too has an ordinance on housing standards and is using the area system for enforcing it. In addition, however, Milwaukee has adopted or proposed other administrative methods for making the enforcement even more effective.

One of these, which is still in the proposal stage, is to combine maintenance inspection services having to do with fire prevention, the various building code requirements, and sanitation. Maintenance inspection of all structures under this proposal would be handled by a single inspector who could call upon specialists in the proper departments whenever he encountered problems requiring highly technical knowledge or judgment.

A second administrative step, which has been adopted, is combining enforcement of the city's "Ordinance, Rules and Regulations Relating to Housing" with the American Public Health Association's technique for evaluating the quality of housing. This double purpose type of operation holds great possibilities as an aid in preparing and carrying out a really comprehensive redevelopment program.

A third additional administrative technique, which differs in degree rather than in kind from Baltimore's, is the type of co-ordination employed in enforcing the Health Department's minimum housing standards regulations. Although much of this co-ordination is in but one direction, from the Health Department to other departments, it nevertheless is rather effective.

Milwaukee's fourth administrative technique in this field is still in the thinking stage. The ideas under consideration would create differing sets or levels of housing standards to be based upon the quality of the housing in various areas, i.e., the kind of standards that it would be reasonable to expect for each district or area.

These four administrative matters are discussed below.

COMBINING INSPECTIONAL SERVICES

Chapter i referred to the inspection services involved in the enforcement of a city's ordinances as to use of land. Most of these had to do with building (structure, plumbing, electrical facilities), fire prevention, sanitation, and, overlapping the first three to some extent, those minimum housing standards that some cities have adopted. Most of these inspectional services cover both maintenance of buildings and new construction or major alterations. Although the latter is of un-

doubted importance, it is not as directly related to carrying out a comprehensive redevelopment program, a program that includes measures designed to aid and supplement clearance and rebuilding, as is the former. Consequently, ways and means of improving inspection of new construction or major alterations to assure their compliance with the various regulations need not be considered as thoroughly as the administrative techniques for improving and co-ordinating maintenance inspections, inspections designed to secure compliance with a set of minimum maintenance standards. Maintenance inspection, to be sure, may result in major alterations, but it is the ferreting out of the need for such alterations rather than checking on their construction that is the major problem in redevelopment.

Improvement in the administration of all inspection services may be looked at from two points of view. The first is the effect these inspections produce upon the owner or tenant. Many inspectors and many inspections are confusing and irritating to the one being inspected. Good administrative practice would call for as little confusion and irritation as possible. No confusion should exist as to the department or bureau with which the owner or tenant must deal. The procedures after correction orders are issued should make compliance as easy as possible. The second point of view on inspection services stresses co-ordination or the fitting together of all inspections so that the maximum benefit comes from enforcement of all related ordinances. For example, one department should not order the installation of new wiring only to have another department order the building vacated shortly after the wiring is put in.

Although the two points of view are not unrelated it is the latter problem or objective in improving administrative techniques that is of paramount concern here.

This is a rather lengthy preface to a discussion of a report issued by the city of Milwaukee in 1949 on combining inspection services.⁶ It covers both construction and maintenance inspection, and looks to improvement of administrative techniques from both the points of view mentioned above. It is the report's recommendations on maintenance inspection and departmental co-ordination, of course, that are the major concerns here. Its recommendations, however, on new construction and major alterations inspections and its discussion of reducing the number of inspectors with whom an owner must deal should not be overlooked by those interested in these matters.

Maintenance inspection in Milwaukee is carried out on both a complaint and an area program basis. The Department of Building Inspec-

6. George C. Saffran, budget supervisor, and Robert C. Garnier, classification examiner, *Survey of Building Inspection Services* (City of Milwaukee, 1949).

tion and Safety Engineering makes all its maintenance inspections in response to complaints or referrals from other departments. Most of its inspections, however, are of new construction, major alterations, or for demolition. (Milwaukee has established a commendable record in condemning unsound structures.) The Fire Prevention Bureau and the Sanitation Division of the Health Department also make maintenance inspections on the basis of complaints and referrals, but in addition they carry out a positive inspection program by areas or districts. In addition, inspectors in the housing section of the Health Department enforce the housing standards ordinance on a specific area basis, i.e., not covering the whole city but working in an area or areas selected specifically for that purpose. This last type of inspection will be discussed in more detail later on.

In an introduction to the problem of multiple and overlapping inspectional services, Saffran and Garnier wrote:

In the consideration of inspectional activities performed by the Fire Department, Health Department, and the Department of Building Inspection and Safety Engineering, the need for inter-departmental coordination soon becomes apparent. Whenever more than one department is responsible, in part or in whole, for the general welfare and safety of a community, there inevitably develops a duplication of activity. This duplication, if not checked, eventually creates an administrative dilemma resulting in inefficiency and waste.

It is necessary, therefore, to plan carefully for coordination which can be achieved by several means. The most practical and desirable method to achieve this coordination is through inter-departmental cooperation. This can be accomplished without the necessity of resorting to mandatory regulations or laws and the results of such genuine cooperation are generally more satisfactory.

The City of Milwaukee is faced with a situation involving a duplication of inspectional services. This duplication, while serious in itself, also precludes efficient and economic practices. Inspectional practices with respect to Fire Prevention, Sanitation, and Building Inspection have grown with little regard for each other. They are tradition-bound and are often erroneously justified by years of "satisfactory" performance. Inspectional practices are dictated, in large part, by laws and ordinances. In most instances, the laws governing inspectional practices are sound and there is no valid reason to remove any primary responsibility from the various departments. There is, however, a decided need to coordinate various departmental activities in the early inspectional stages so that initial duplication may be avoided. Individual departments should continue to execute the law, but this can usually be relegated to that phase involving unusual problems or requiring legal action. Initial and routine inspections may very often be delegated to other departments doing similar work and trying to achieve similar goals. It is this type of inter-departmental cooperation which is desirable and which provides a sound foundation for efficient and logical administration.⁷

The report covers in detail all the inspection services of the three departments except for the housing section of the Health Department,

7. *Ibid.*, p. 14.

the section that enforces on an area basis the minimum housing standards ordinance. In the course of their examination of these inspection services, Saffran and Garnier found that the fire and sanitation inspectors noted many violations of ordinances enforced by departments other than their own. When such violations were noted, they were referred to the appropriate department for an additional check up. Nevertheless, because it was not the inspectors' function or in their training to seek out ordinance violations other than those of their own ordinances or regulations, there was no assurance that violation of all other ordinances were being caught. In addition, Saffran and Garnier found overlapping in the ordinances themselves so that sometimes one inspector would order the correction of a violation covered by ordinances enforced by other departments.

This situation is described in the report under a discussion of public health sanitation:

When a health officer notes a situation which currently is brought to the attention of the Fire Prevention Bureau or the Inspector of Buildings, a memo is prepared listing any defects which now come under the jurisdiction of either of these departments. However, the line of demarcation is often very slight. For example, improper plumbing connections endanger the health of the citizens. The Health Department, therefore, orders proper repairs to be made or new plumbing installed. Further, an accumulation of dirt and junk constitutes not only a fire hazard but a health hazard as well. Since the health officers exercise more extensive authority than fire prevention officers, the matter is usually resolved by the Health Department. Health officers check for submerged outlets and other cross connections in plumbing, check further that gas burners for hot water are properly vented and perform such other functions as may seem desirable for the health and safety of the public.⁸

Later on the report spells out the relationship among these three departments in respect to inspections:

The present system of inspection by the Fire Prevention Service, the Sanitation Division, and the Inspector of Buildings creates a duplication of activities which very often makes logical justification difficult. Since each department operates on a district basis, this duplication of effort is inevitable. When such duplication occurs within the same day, as it often must, it fosters a feeling of municipal inefficiency to the general public. In cases where a building is visited several times within a short period by various city inspectors, an actual public nuisance is created which defeats any and all attempts toward desirable public relations by City Officials.

Field audits and interviews revealed that many situations uncovered by Fire Prevention Inspectors and Sanitation Inspectors are referred to the Inspector of Buildings for disposition even when the violations required no craft inspections and could have readily been resolved by the initial inspector. . . .

This same type of illogical procedure is employed not only in referrals to the

8. *Ibid.*, p. 19.

Inspector of Buildings but also between the Fire Prevention Service and the Sanitation Division. For example, a Sanitation Inspector noticed a wooden ash bin while inspecting the basement of a rooming house. This was considered a fire hazard and referred to the Fire Prevention Service for a repeated inspection. It is reasonable to assume that the Sanitation Inspector could have formally brought this condition to the attention of the owner with other defects which were noted during the detailed inspection tour. The result was that the owner has be be appraised of this condition by the Fire Prevention Service after another needless inspection. It is this type of duplication which could readily be avoided with the result of reducing the total number of inspections made on these premises, thereby increasing the effectiveness of inspectional operations.⁹

As a result of their observations, Saffran and Garnier recommended:

. . . that subsequent maintenance inspection activities of the Fire Prevention Service and the Sanitation Division be on a building classification basis in lieu of the present overlapping basis. . . .

The basic function of both the Fire Prevention Service and the Sanitation Division is to enforce proper housekeeping conditions. To the extent that these functions overlap, both departments should cooperate in a joint program of inspector training. When a situation occurs whereby the inspecting department cannot cope with the circumstances, it is expected that a referral will be made to the proper department. The purpose of this recommendation is merely to permit inspecting departments to resolve minor complaints and refer only those requiring specialized knowledge or legal action. . . .

The building classification basis for inspection has the obvious advantage in that countless duplicated inspections at the initial level can be eliminated. There are other advantages. From the public point of view, there will be fewer city employees making inspections which are essentially the same. Furthermore, certain inspectors will become associated more closely with certain types of building, and will, therefore, enjoy greater authority in the public's mind.

This recommendation in no way precludes specialized inspections, nor does it remove the primary responsibility for a function from any department. On the contrary, departmental authority would be more effective and would be strengthened. Although the initial administration of the laws may be delegated to other departments, the ultimate law enforcement would remain basically the same. The advantage of this type of interdepartmental cooperation is that it may not require any basic changes of laws or codes but can be promulgated by the joint action of the heads of the departments.¹⁰

The report carefully pointed out the distinction between inspection for new construction and maintenance inspection. Their recommendations applied only to the latter. New construction and major alterations would remain the sole responsibility of the Department of Building Inspection and Safety Engineering.

These recommendations seem to make sense. Although the report emphasizes the savings and improved public relations aspects of such a

9. *Ibid.*, pp. 20-24.

10. *Ibid.*, pp. 24-25.

change, its value for more effective law enforcement on an area basis and in conformity with a comprehensive redevelopment plan should be obvious.

It is unfortunate that the report did not face the problem of inspectors in the housing section of the Health Department. Because they will be the primary inspectors in an area enforcement program, their work might well have been tied in with the other inspection services. Actually, the recommendations that apply to the sanitary inspectors could also apply to those in the housing section. In fairness to the report, it should be said that at the time the study for the report was made, the housing inspectors were engaged in survey rather than enforcement work.

In summary, the report advocates an administrative arrangement that seems almost mandatory if cities are to make more effective use of their controls over the use of land and the condition of dwellings on the land. Multiple inspections and divided jurisdictions, in addition to being costly and duplicating, can be co-ordinated only by complicated, cumbersome, and usually quite ineffective procedures. An early and major step toward a comprehensive redevelopment program is co-ordination by funneling inspection services through as few inspectors as possible. One maintenance inspector with specialists on tap for more complex cases appears to be an excellent solution to the problem.

USE OF APHA SURVEY METHOD WITH HOUSING LAW ENFORCEMENT

This administrative technique is such a direct and obvious one that it seems strange it is not practiced more widely. Milwaukee was one of the first cities to use the American Public Health Association's appraisal method for measuring the quality of housing. Housing inspectors assigned to the Health Department were trained in this survey method and spent several years evaluating large areas of Milwaukee.¹¹ The primary purpose of this survey work was to map out areas suitable for redevelopment and rehabilitation. It has also served to turn up violations of the minimum housing standards ordinance.

Early in 1949 the housing inspectors were taken from their survey work and assigned the job of enforcing the housing ordinance on an area basis. They were able to use the findings of the APHA survey as

11. The result of much of their survey work was presented in a report of the Urban Redevelopment Coordinating Committee, *Blight Elimination and Urban Redevelopment in Milwaukee*, (City of Milwaukee, 1948).

For a discussion and evaluation of survey methods in redevelopment, including a comparison of the APHA and other techniques in light of experience with them to date, see Allan A. Twichell's contribution to this volume: "Measuring the Quality of Housing in Planning for Urban Redevelopment."

a basis for ordering a correction of violations. Thus they could accomplish much more than if they had had to start from scratch.

Even more important, however, is their continued use of the survey forms in inspecting dwellings for housing code violations. Filling out a schedule used in rating the quality of the structure actually takes about the same amount of time as does filling out a form for checking housing code violations. The former covers all that must be checked for the code violations.

The value of this type of operation is apparent. Basic to any redevelopment program is a measure of the quality of housing in various areas of the city. Such surveys are rather expensive, require special training for the field men, and usually are not kept up to date. By coupling the survey work with routine inspection services, inspections that cover every house in an area, survey data are produced at relatively little additional cost to the city. This is probably one of the neatest administrative devices in any current redevelopment program.

The Housing Authority has also made use of the APHA scores for purposes other than rating the quality of housing in an area. When it must choose among public housing applicants who are equal in all other respects, it uses the APHA scores to ascertain which applicants are living in the worst dwellings and neighborhoods. With so many more applicants than housing units, an additional objective criterion for making selections is a genuine help to fair and humane administration.

ENFORCEMENT OF THE HOUSING CODE ON AN AREA BASIS

As stated earlier both Milwaukee and Baltimore have undertaken housing law enforcement on an area basis. Milwaukee, however, has not received as much publicity for what it has done because it has not concentrated on the more spectacular kind of clean-up campaign. Quite probably this, in turn, is because Milwaukee does not have the outdoor toilets and trash-filled, crumbling-fence backyards as does Baltimore. Milwaukee, nevertheless, has begun a sound campaign for the enforcement of the housing code on an area basis.

More significant than the area enforcement program itself, perhaps, is Milwaukee's recognition that it is an integral part of an intelligent redevelopment program. Often this relationship is not recognized or, when recognized, given but lip service.

In the study mentioned earlier, *Blight Elimination and Urban Redevelopment in Milwaukee*, the problems of a redevelopment program were analyzed briefly and a definite procedure was recommended for getting urban redevelopment underway. The program included reha-

bilitation as well as clearance and tied in enforcement of the city's controls over housing and other forms of urban land use. The report contains the following paragraph:

Fundamentally, there are two considerations. First there are the causes of blight, which must be removed or inhibited. The areas which at present either present no particular problem or are only slightly affected by blight should be properly protected and conserved. This can be accomplished only by the effective application of regulatory powers—zoning, control of land use, compulsory standards of maintenance and repair, and prompt condemnation of worthless substandard, and non-conforming buildings.¹²

The report goes on to recommend that those parts of the city that have been surveyed be classified as redevelopment, rehabilitation, or nonproblem areas and that a procedure for taking care of each type of area be adopted. On enforcement of the housing code in such areas, the report recommends

That in *residential redevelopment areas*, the Health Department in enforcing the "Ordinance, Rules and Regulations Relating to Housing," practice interim enforcement, dealing only with the alleviation of the most serious conditions and elimination of sanitary nuisances.¹³

The footnote to this quote is also important:

Extensive rehabilitation or modernization should not be attempted in areas scheduled for demolition within a reasonably short period of time. The importance of a demolition program including a time schedule for accomplishment, therefore, is apparent.

In rehabilitation areas, the report recommends a different procedure for enforcing the housing code: "That within such designated '*residential rehabilitation areas*,' the 'Ordinance, Rules and Regulations Relating to Housing' be fully enforced by the Health Department."¹⁴

An additional recommendation on the rehabilitation area deserves quotation because it is a necessary part of sound redevelopment policy:

That the Land Commission [Milwaukee's planning agency] recommend to the Common Council and the Common Council thereupon declare by resolution that any block or blocks included within such *residential rehabilitation areas* will not subsequently be included in *residential redevelopment areas* (scheduled for demolition) until a specified number of years have elapsed. If owners are to be encouraged and required to improve dwellings in *residential rehabilitation areas*, it is most important that no change be made in the use of all dwelling structures which now meet, or can be made to meet, and which will continue to meet suitable dwelling

12. *Ibid.*, p. 58.

13. *Ibid.*, p. 60.

14. *Ibid.*, p. 61.

standards. Any vacillation in policy which would result in a block being first included within a *residential rehabilitation area*, and a few years later in a *residential redevelopment area*, would be disastrous to any sound rehabilitation activity.¹⁵

Thus this report recognizes the need for a broad program covering clearance, rehabilitation, and conservation and suggests procedures for adopting and putting such a comprehensive plan into effect. Designating areas by the kind of treatment they should receive with the assurance that such designations will be maintained for a specified number of years is essential to a balanced redevelopment plan. A policy on housing law enforcement in these areas is another essential in such a program. Some of these recommendations have received the approval of the Common Council, but unfortunately the Council has not followed through on those parts of the report that would result in an inclusive and balanced redevelopment program.

Within these limitations, however, Milwaukee's enforcement of the housing code has followed these recommendations fairly closely. The report recommended that in areas slated for clearance enforcement be only against nuisances. This is the practice of the housing section of the Health Department. Because the Common Council has not clearly designated such areas, there is some difficulty at times in deciding whether or not a district or block is in a redevelopment area. Where it is clear that redevelopment probably will be undertaken before too long, then only the nuisance items of the sanitation and housing codes are enforced. If redevelopment plans fall through or if it appears that redevelopment is still some years away, then the whole code, including structural repairs, is enforced.

The selection of areas for intensive enforcement is a Health Department decision, but the Land Commission (Milwaukee's planning agency) is informed of the action. In addition, the Housing Authority and the Land Commission keep the Health Department advised of areas they intend to acquire for public housing or for clearing and rebuilding. This arrangement avoids conflict between housing code enforcement and direct action redevelopment areas. A more positive arrangement, however, would be preferable—a policy under which the Health Department would have no question as to the areas in which it should carry out intensive enforcement of the housing code. In short, a policy like that recommended in the report on blight is needed.

The housing code enforcement program has also been tied in with the plans of the Housing Authority to the extent of condemning those structures unfit for human habitation in areas to be acquired for public housing. The object is to do away with such structures so that the Housing Authority will not have to buy them and tear them down. The

15. *Ibid.*, p. 61.

Health Department has gone along with this policy to a certain extent, but finds it necessary to be extremely careful in designating structures in these areas as unfit for human habitation. The reason for caution is that the Health Department has established a good reputation in such areas. Its housing enforcement officers are looked upon as friends and helpers, and the Health Department wants to maintain this relationship. If it were to placard borderline houses as uninhabitable just to save the city money, the reputation of the Health Department would drop and years of good will would be lost. When the Health Department, however, finds a structure in a redevelopment area that should be vacated it discourages the owner, if possible, from repairing it.

Milwaukee has not adopted a policy of vigorous enforcement of occupancy standards in areas slated for clearance. High acquisition costs both in eminent domain and negotiation often stem from an illegal use (overoccupancy) of the structure because such illegal use increases the income and, therefore, the capitalized value. More than nuisance and condemnation enforcement, it would seem, should be undertaken in areas slated for clearance. A detailed policy is needed on those sections of the housing code that should and those that should not be enforced in redevelopment areas.

In addition to tying in its enforcement activities with the work of the Housing Authority and the Land Commission, the housing section of the Health Department relates its enforcement program with other inspection services. If violations are found that go beyond the provisions of the housing code, a memo on them is prepared and sent to the appropriate department. The inspectors have been trained in observing violations of building standards, and many inspectors have attended fire prevention training school. About the only cases beyond their ability to deal with are those involving illegal installations. These must be corrected by the building inspector.

The housing inspectors also aid in zoning enforcement in that they send memos to the building inspector (enforcer of the zoning ordinance) on new dwelling units, alterations, new rooming houses, etc. This permits the building inspector to check his records to see if permits have been issued and if zoning regulations are being observed.

One of the housing section's major problems has been relocation. Relocation troubles may arise because a house is decreed unfit for human habitation or through enforcing the housing code's occupancy standards. There is no agency to give a hand in relocating families and the problem is acute, particularly when families with many children are involved. The Children's Court has been of some aid but much more help is needed. The housing section feels it is responsible for more than the enforcement of the law. It feels it has a responsibility to

help the people whose lives are disrupted by code enforcement. (Baltimore's housing bureau holds the same view and spends a great deal of time with welfare agencies trying to relocate the families it has had to displace.)

This feeling of responsibility by the housing section for the families displaced extends to the neighborhood in which the housing code is being enforced. The housing section has taken the initiative in encouraging blocks to organize for self-improvement. The inspectors make an effort to interest the owners in repairing and fixing up their houses. They have encouraged the people to take the initiative in meeting the minimum standards or even in going beyond these standards.

Milwaukee does not have a housing court and this is recognized as a hindrance to the program.

Milwaukee and Baltimore officials are alike in their inability to enforce the housing code to the degree they would like. Milwaukee, however, requires bathing facilities for every dwelling unit. This has been enforced in all areas except those that are so severely blighted that the only solution is demolition. Strict enforcement in such areas would mean vacating houses rather than installing the facilities, and the housing shortage has made such a program impossible.

POLICY ON VARYING STANDARDS OF ENFORCEMENT

On the issue of setting different maintenance standards for different areas of the city, a question that has only begun to be explored, Milwaukee has reached the point of drafting, but not introducing, state enabling legislation. The rationale of such a proposal is that the present type of housing maintenance standards must of necessity be geared to the condition of the poorer houses in the city. No municipality can enforce minimum standards of maintenance if great areas of housing in the city are well below such standards. The result is a set of standards that are designed to raise the level of the worst houses but nothing more. They do nothing to prevent the deterioration of the better houses to or toward the minimum standards. In other words, conservation of essentially good housing is a necessary supplement to a clearance program, but present minimum standards do little or nothing to achieve or even to encourage conservation. Higher standards for these relatively good areas are needed.

To deal with this problem, Milwaukee's health commissioner, Dr. E. R. Krumbiegel, drafted enabling legislation to permit Milwaukee to prescribe varying standards for different grades of areas. Although the proposed legislation was not introduced, it still deserves attention as a possible means of furthering rehabilitation and conservation through effective enforcement of police powers over land use.

The proposed draft would authorize Milwaukee to establish minimum housing and sanitation standards for three types of areas into which the city would be classified. These areas and the criteria to be used in delineating them are:

Area for demolition. An "area for demolition" is any area within a city consisting of 30 or more dwellings in which one-half or more of the dwellings are so obsolete, inadequate, unsafe, or insanitary that clearance, replanning, and reconstruction on a large scale basis are, in the opinion of the local governing body, necessary for the promotion of the public health or safety or welfare.

Area for rehabilitation. An "area for rehabilitation" is any area within a city consisting of 30 or more dwellings in which less than 50 per cent, but more than 10 per cent of the dwellings are obsolete, inadequate, unsafe, or insanitary and in which, in the opinion of the local governing body based on economic, planning or social considerations, rehabilitation of existing dwellings on a large scale basis is necessary for the promotion of the public health or safety or welfare.

Area for protection. An "area for protection" is any area within a city consisting of 30 or more dwellings in which 90 per cent or more of all the dwellings meet, in the opinion of the local governing body, ordinary acceptable standards of sanitation, safety and maintenance, but within which 10 per cent or fewer of the dwellings are obsolete, inadequate, unsafe and insanitary.¹⁶

The city would be given authority to establish minimum standards for each type of area, the standards rising with the quality of the area's present dwellings. Thus three sets of minimum standards would be set up—one for each type of area.

In addition to classification on the basis of housing quality, the proposed legislation includes a classification by housing types for which a graded set of standards would also be established:

1. Private Dwelling. A "Private dwelling" is a dwelling occupied by but 1 family, and so designed and arranged as to provide cooking and kitchen accommodations for 1 family only.

2. Two Family Dwelling. A "two family dwelling" is a dwelling occupied by but 2 families, and so designed and arranged as to provide cooking and kitchen accommodations for two families only.

3. Multiple Family Class A. Multiple dwellings for class A are dwellings which are occupied more or less permanently for residence purposes by several families and in which the rooms are occupied in apartments, suites, or groups, and in which each combination of rooms is so arranged and designed as to provide for cooking accommodations and toilet and kitchen sink accommodations within the separate units.

4. Multiple Family Class B. Multiple dwellings of class B are dwellings which are occupied, as a rule transiently, as the more or less temporary abiding place of individuals who are lodged, with or without meals, and in which as a rule the rooms are occupied singly and without any attempt to provide therein or therewith cooking or kitchen accommodations for the individual occupants. . . .

16. Taken from a draft prepared by E. R. Krumbiegel, M. D., health commissioner of Milwaukee in February, 1949.

Minimum housing standards would vary for types of dwellings as well. In the words of the proposed legislation:

The minimum dwelling standards may vary for different classes of dwellings such as private dwellings, 2 family dwellings, class A and class B multiple family dwellings, and may vary for different types of class A and class B multiple family dwellings, but shall be uniform for every [*sic*] class or type within areas for rehabilitation, and for every [*sic*] class or type within areas for protection.

Under such legislation, there would be a set of minimum standards for each of the four dwelling types in rehabilitation and protection areas. In demolition areas there would be no variation in standards by dwelling type.

The proposed legislation does not deal exclusively with housing. The proposed bill contains the following section:

Maintenance of Buildings and Structures. All garages, barns, out buildings, stores, factories, warehouses, fences, and any other structures or buildings, or anything located upon any privately or publicly owned land shall be properly maintained or kept in a state of repair comparable to the general level of the state of maintenance and repair of similar buildings, structures, things or parts thereof, located in the same neighborhood.

With these powers, the city would be able to require much better maintenance than its present authority makes possible. In effect the municipal area would be zoned in another way, zoned for maintenance as well as for type and degree of land use now covered by the zoning ordinance.

Admittedly further thought and discussion are in order before a program of graded standards can be adopted. One objection that probably would be strongly urged against it can easily be foreseen. Police power measures are justified on the ground that they protect the general safety, morals, or welfare. If the safety and welfare of people who live in old, partly blighted areas are adequately protected by enforcing a set of very minimal standards of maintenance and occupancy, how can higher standards in other areas be justified under the police power? In zoning, however, the principle of varying standards of lot coverage, density, yard space, height, and use has been accepted for some time. As a matter of fact this principle is of the essence of zoning, which, of course, is also an exercise of the police power. Different maintenance standards on an area and dwelling-type basis, therefore, do not seem unreasonable. Here it should not be forgotten that many high courts, in upholding zoning ordinances as valid applications of the police power, have stressed the fact that the ordinances cover all or nearly all privately owned land in their cities and are integral parts of comprehensive plans for the physical development of the municipal areas.

At all events if such a system is not adopted for housing codes they will continue to be effective, with occasional exceptions, only in the worst areas, closing buildings that are not salvageable and enforcing very minimal standards for all others. Because the better areas are considerably above these minimal standards, the city now has no power to prevent their decline to this low level. Poor maintenance and overoccupancy in a relatively few structures in an otherwise good area often sets the tone and starts the whole area down the slide to blight and slum conditions. Such a decline can start and gain considerable momentum even though there be full compliance with existing laws on zoning, fire prevention, building, etc. One means of preventing this insidious process would be the proposal under discussion in Milwaukee. It deserves serious consideration.

One further suggestion was included in the proposed legislation. It was aimed to overcome an assumed deterrent to rehabilitation resulting from an increase in assessed valuation because of the improvements. The section on this subject is:

Assessed Valuation of Improved Dwellings. Assessed valuation for purposes of taxation of property of any private dwelling, 2 family dwelling or class A or class B multiple family dwelling, which is ten years old or more and which is located in an area in which the average of the fifty closest private, 2 family or class A or class B multiple family dwellings is twenty or more years, shall not be increased because the dwelling has been altered, repaired, or improved in any way whatsoever: Provided, however, that the assessed valuation may be increased whenever the alteration, repair or improvement has resulted in an increase in the number of dwelling units or an increase in the number of rooms used for living purposes within any dwelling.

Many cities have had the experience of instituting clean-up, fix-up, and rehabilitation campaigns only to be told that the assessment officer is discouraging such operations by increasing assessed valuations when an owner co-operates with the campaign and improves his property. It would seem sensible, therefore, to remove this apparent penalty for co-operation. The matter, however, is not quite that simple even aside from its doubtful legality. There is some question as to whether the resulting increased assessment is actually a deterrent. It may be only an easily seized upon excuse for not reconditioning one's property. On the other side, however, is the example of urban redevelopment laws that authorize frozen or fixed assessments, at least for a period of years, for large-scale redevelopment projects. In effect, permitting a redeveloper of a large-scale project to pay taxes on the basis of the assessed valuation before redevelopment amounts to not assessing the increased value due to his improvement of the property. If it is sound to follow such a policy for large rebuilding projects, then at least a

strong argument might be made for applying the same principle to reconditioning undertaken by small property owners.

SUMMARY

Milwaukee's experience adds more tools for using police power resources as aids and supplements to clearance and rebuilding and as an integral part of a comprehensive redevelopment program. Administratively, Milwaukee has recommended combining inspectional services so as to eliminate, or, at least to reduce duplication drastically and to achieve more effective performance. Its officials have also recognized the advantages of combining survey work on housing quality with the enforcement of a minimum housing standards ordinance. As to policy, Milwaukee has recognized the case for enforcing minimum housing standards on an area basis so as to improve an area as a whole rather than individual, unrelated properties. In addition, the city has adopted a policy of enforcing only nuisance abatement regulations in those areas slated for clearance at an early date. It has also established a series of sound recommendations on co-ordinating housing law enforcement with clearance and rebuilding and recommended well-designed methods of carrying out a comprehensive redevelopment program.

And finally, it has broken new ground in proposing graded sets of maintenance standards for areas that vary in housing quality.

Although more needs to be done, Milwaukee's officials deserve the thanks of all other forward-looking local officials and citizens for real contributions to redevelopment thought and practice.

KANSAS CITY

Kansas City also has recognized the need for more effective regulation of building and land use as well as the desirability of a positive policy for the enforcement of the regulatory measures. These matters were studied by the city's Department of Research and Information and in February, 1950, the Department issued a report entitled, *Housing Inspection and Rehabilitation Program for Kansas City, Missouri*.

NEED FOR A COMPREHENSIVE PROGRAM

This report presented a series of recommendations for putting such a program into effect. The importance of the subject to a redevelopment program was clearly recognized. In submitting the report to the City Council, L. P. Cookingham, the city manager, wrote:

In considering the data contained in this study, the members of the Council are requested to give some thought to the problem of redevelopment, which is closely

related to the problem of rehabilitation. The Housing Act of 1949 makes provision in Title I for substantial federal aid to *redevelopment* projects. Should the program of *rehabilitation* and *redevelopment* be combined under one administrative agency, the over-all program might be large enough to justify the establishment of a separate city department to execute the program.¹⁷

Although the report did not recommend a new department to handle both redevelopment and rehabilitation, this suggestion by Mr. Cookingham deserves consideration. If one department is not responsible for clearance and rebuilding projects, area rehabilitation and co-ordinated enforcement of police power measures, there should be some strong administrative machinery to assure that these activities are combined in planning and action. Although a department responsible for the combined operation would not, of course, assure the optimum results, it would at least set the stage for them. With and after the organizational change would come a whole series of controversies, maneuvers, and problems before the new machinery would begin to work, but given intelligent administrative leadership the possible outcome would seem to justify the effort required.

The report noted the limited means possessed by the city to undertake a broad program for rehabilitation. The Department of Buildings and Inspections is concerned primarily with new construction, with housing inspections based on complaints, and with only an occasional condemnation of a building as unfit for habitation. Other inspection services do not deal with housing. "The Division of Fire Prevention is concerned mainly with the inspection of places of public assembly, hotels, hospitals, boarding houses, and apartment houses with reference only to fire safety and the inspection of special fire hazards. . . ."¹⁸ The Health Department inspects for rats and vermin, handles school sanitation, and enforces the abatement of nuisances.

The report also noted the lack of adequate authority to enforce minimum standards of housing maintenance:

At present there is not adequate ordinance authority for the city to enforce necessary minimum health and safety standards with reference to existing structures. Particularly lacking are definite standards concerning overcrowding of dwelling units, ventilation, heating, sanitary facilities, and structural maintenance. In certain instances of aggravated threats to health and safety, the city, acting under authority of the building code, has been able to force demolition of unsafe structures. . . .¹⁹

17. *Housing Inspection and Rehabilitation Program for Kansas City, Missouri*, a report prepared by the Department of Research and Information, Kansas City, Mo., February, 1950.

18. *Ibid.*, p. 11.

19. *Ibid.*, p. 12.

While it recognized this lack, the report pointed out the possibilities of co-ordinating existing inspections and controls with a new housing maintenance program:

The various building codes and special-purpose ordinances can be of assistance in connection with a housing inspection and enforcement program if properly related to a housing code designed to provide specific standards for enforcement.²⁰

In addition, the report mentioned three other areas where more information or authority are needed to round out the proposed housing enforcement program: (1) the lack of inclusive and reliable information on housing conditions; (2) the absence of a service to advise owners on necessary repairs to prevent deterioration and to encourage occupants to maintain more healthful living conditions; (3) the lack of authority to prevent the sale of tax delinquent property on which there are structures in a state of serious disrepair.

These three weaknesses are not peculiar to Kansas City; they are almost universal. Planning commissions, housing authorities, and health departments in some cities, however, have recently collected and analyzed information on housing conditions by using the APHA survey technique, but such information has usually been limited to a small area of the city. Advice to owners and occupants on improving their houses is almost nonexistent except for the rather superficial clean-up, fix-up campaigns that many cities go in for each spring. This type of information and aid, however, is not what the report referred to. Some cities have given some attention to correcting the third deficiency.

With the deficiencies clearly outlined, the report took up the objectives of a balanced enforcement program. The first objective of the program is "the rehabilitation of existing housing which can be made into livable housing of acceptable minimum standards."²¹ The second is the removal of structures ". . . which are unsafe and unsanitary and which cannot be rehabilitated without prohibitive cost."²² A third point is that "after housing units have been brought up to acceptable minimum housing standards, a program of continued inspection should insure that housing will not be allowed to slip back into a state of deterioration."²³

These first three objectives apply only to enforcement of a minimum standards housing maintenance ordinance. A second group of goals is based on the recognition that the first three are by themselves insuffi-

20. *Ibid.*, p. 12.

21. *Ibid.*, p. 14.

22. *Ibid.*, p. 14.

23. *Ibid.*, p. 14.

cient and that it is the responsibility of the city to do more. In the words of the report:

A second objective of the housing program should be to provide new housing so as to be able to accommodate an increased population in future years, to relieve overcrowding in existing structures, and to provide replacement housing for units which have been removed. It is in this aspect of the program that close co-operation between private and public housing groups is essential. To achieve this objective, there must be formulated a long-range housing plan in which the realms of private and public responsibility are clearly delineated. Community planning of this type should include proper site layouts for new housing developments and careful selection of the location of parks, playgrounds, schools, and other community facilities.²⁴

All of these objectives are sound. It is surprising in fact that more cities have not recognized the need for such a program long ago and given more than lip service to the need.

RECOMMENDATIONS

In order to carry out these objectives, the report included a series of recommendations. They deserve rather close examination to see how effective they might be in reaching the objectives outlined.

The first recommendation is that a Division of Housing be set up in the Health Department. This proposal is based on the practice of other cities and on the belief that a program to enforce minimum housing standards is directly related to alleviating unhealthful living conditions.

A second recommendation is that the city adopt a housing code that would define minimum housing standards covering such items as toilet facilities, heating, ventilation, maximum room occupancy, and structural maintenance. It would authorize the Health Department to make necessary rules and regulations to enforce such standards. In addition, the ordinance would include a section empowering the Division of Housing to enforce all other ordinances on housing conditions as well as the housing code.

The report further recommended that a co-ordinating committee be appointed to aid the Division of Housing in enforcing the housing code. Members of this committee would be administrative officials of the following departments: Health, Welfare, Fire, Police, Planning, and Public Works.

Another recommendation is that the enforcement of the Housing Code be on an area basis. The reasons for this recommendation are basically the same as those discussed earlier. One reason given that deserves particular emphasis is that if enforcement were on a com-

24. *Ibid.*, pp. 14-15.

plaint instead of an area basis, “. . . the program would be scattered so thin that it would be difficult to measure its effectiveness.”²⁵

The recommendations also include in some detail the exact functions that the Division of Housing would perform. The most important responsibility, of course, is the enforcement of the housing code on an area basis, with the Division selecting substandard areas where such improvement of existing structures is feasible. A second function would be to make a thorough survey of housing conditions in the city “. . . and to maintain accurate data on housing to provide a sound basis for rehabilitation plans (i.e., code enforcement) and planning redevelopment programs—either public or private.”²⁶ Thus the Division would become a housing data collection agency as well.

A further recommendation is that the Division, with the “close cooperation of other city departments concerned . . . initiate condemnation actions with respect to structures not subject to rehabilitation. . . .”²⁷ The Division would also be given the job of assisting other departments in “. . . working out details of any necessary public improvements such as rehabilitation of sidewalks, curbs, and gutters, street paving, and sewers.”²⁸ This recommendation applies only in those areas in which the housing code is enforced. The ordinary work of the inspectors will reveal many places where such improvements are needed. Also the Division, together with the co-ordinating committee “. . . should assist the City Plan Commission in co-operating with private housing groups in providing information which will better enable them to take advantage of urban redevelopment laws.”²⁹ A final function of the Division would be to administer the Health Department’s rodent control and environmental sanitation programs because they are so closely related to housing.

Another recommendation of the report is that the department that has jurisdiction over the sale of tax-delinquent property (the Land Trust) be required to rehabilitate structures on such land before it is sold so that the buildings will meet the requirements of the housing code. If the structures are so badly deteriorated that rehabilitation is uneconomic, the Land Trust would be required to demolish them before selling the land.

EVALUATION OF THE RECOMMENDATIONS

The report has recognized that a redevelopment program should include a housing code with area enforcement effectively tied in with

25. *Ibid.*, p. 4.

26. *Ibid.*, p. 5.

27. *Ibid.*, p. 5.

28. *Ibid.*, p. 5.

29. *Ibid.*, p. 5.

other enforcement and inspection services. Responsibility for the program in the Health Department also makes good sense because health departments are familiar with the kind of work to be done. The use of a co-ordinating committee also should prove a useful device to pave the way for a broad and balanced program. These are the basic recommendations, and they are persuasive.

Some of the other recommendations, however, raise questions. One of these is quite basic to the whole idea of comprehensive redevelopment. More is needed than the selection of substandard areas in which the housing code is to be enforced, and the report did recognize this fact. The selection of these areas, however, seems to be made the responsibility of the Division of Housing. This makes it more than an enforcing agency; it becomes a potential planning agency as well. These areas should be selected or at least proposed by the top planning agency (with the advice and assistance of others, to be sure). The report clearly pointed out that enforcement activity must be supplemented and buttressed by public housing, development of new areas, and redevelopment. Enforcement, therefore, is only a part of this comprehensive program, and the selection of substandard areas for housing code enforcement should be the primary responsibility of the Plan Commission, the agency that deals with the whole complex of city development, redevelopment, and rehabilitation.

An omission in the recommendations, which might have been mere oversight, is the failure to include the Housing Authority as a member of the co-ordinating committee. The Authority would have a direct interest in enforcement, and it should fit in its policies and actions with the house code enforcement program.

CHICAGO

Over the past eight years or so, Chicago, often looked upon as a problem child in the municipal administration family, has taken steps toward an improved enforcement program. Perhaps because of the large areas in Chicago that obviously need improved housing and the publicity given to fatal fires in buildings that were violating existing code provisions, the considerable advance that has been made toward better enforcement has gone almost unnoticed except for a few persons who are particularly interested in such matters. Be that as it may, the Chicago experience is valuable primarily for two reasons.

The first is the effect of work done by a citizens' organization in behalf of more effective enforcement. Some of the credit for the advances may be given to the Metropolitan Housing and Planning Council of Chicago for a campaign started in 1943. By no means was this

campaign all of the war—much was done by administrative officials, by some aldermen, and by other groups—but the Council has been a devoted friend and vigorous proponent of practical reforms in this field.

The second characteristic of the Chicago experience that is of particular importance is the achievement of the program by increments. In most cities it is difficult to secure the adoption of a program full blown. Chicago is an example of how changes can be made gradually—adding a necessary element here, a desirable technique there—until by the end of several years the total result is a fairly creditable one. The additions are so gradual that the total change is not realized unless analyzed. In Chicago the difference between 1943 and 1951 is substantial, but the results accomplished in any one year do not loom as major advances.

The major achievements in Chicago are: (1) administrative reform through consolidation of most building inspection services in one city department, (2) adoption of the area enforcement technique, (3) improvement in handling of housing violations by the courts, and (4) assumption by the city of responsibility for aid in relocating families displaced by the enforcement program. For none of these items have the ultimate objectives been reached or even approached but some progress toward them has been made. Chicago has laid a groundwork for an effective enforcement program.

ADMINISTRATIVE REFORM

In 1943, Chicago's inspection services, particularly on housing violations, were very poor as to both the quality of the work and the administrative organization for it. Four departments were charged with responsibility for enforcing code provisions having to do with the maintenance of existing structures.

The Community Sanitation Section of the Health Department enforced the health provisions. These dealt primarily with such matters as sanitary conditions, room size, and water supply. Thirteen inspectors were available for the entire city. Inspection was on the basis of complaint or referral only. Enforcement was sporadic and ineffectual.

The Building Department, in addition to handling inspection of new construction and alterations, was required to make annual inspections of all residential structures over three stories in height and all structures of mixed use of less than four stories. A fee was charged. The check-ups covered structural conditions only. Usually the inspection was only of the exterior and wide inconsistency existed in the thoroughness, regularity, and quality of the work. The department also made inspections for structural safety on the basis of complaints or referrals.

In addition to these two departments, the Fire Prevention Bureau carried out inspections for fire conditions. As in most cities, these were primarily of places of public assembly. They were also made in response to complaints but did cover at regular intervals those operations that created particularly dangerous fire hazards.

The Department of Streets was also in the picture: it was responsible for the cleaning of alleys and beyond the alley for a distance of ten feet into each adjoining lot. It was also responsible for garbage removal and rat extermination—in the alley up to the lot line, however, not in the structures.

Under such an arrangement, effective enforcement was almost impossible. The departments had similar and artificially defined functions; no one building was checked for all violations at one time. Inspections on the basis of complaints were for the complaint cited and did not include inspection for other violations. Some of the worst violations were overlooked.

Actually, the code provisions these various departments were charged with enforcing were fairly good provisions. They had many of the basic elements of a housing code and could be so used. These provisions, however, were scattered throughout the code; there were conflicts among them; some provisions were retroactive, i.e., applicable to existing structures; others were not; and there were, of course, many gaps.

The first move in the campaign for better enforcement was aimed at increasing the number of housing inspectors in the sanitation section of the Health Department. The number was increased from thirteen to twenty-five, and subsequently an ordinance was introduced in the City Council providing essentially for combined housing inspection services, establishment of an appeal board for rulings of the inspectors, and authority to repair a structure when the owners failed to do so, making the cost as a lien against the property. This ordinance was opposed by some trade union groups who feared the concentration of trade skills in one inspector. The opposition was sufficient to prevent passage of the measure, but it provided the ground for subsequent City Council action and had the immediate effect of securing the creation of a new position, Co-ordinator of Permits and Inspections, a position responsible to the mayor.

In 1945, the civic organizations once more asked for an increase in the number of housing inspectors, and once again more inspectors—this time eight—were added.

The biggest advance toward an effective enforcement operation, however, was made in the fall of 1945. A special city budget survey committee, which had the backing of the Association of Commerce and

Industry, the Civic Federation, and the City Council, made a thorough survey of all the city's inspection services. The recommendations of this study covered more than housing inspection, but the recommendations on this work were essentially what the civic groups had been advocating for some time. The report proposed the creation of a department of building and housing to handle all inspection services. On housing specifically it recommended that—

All Inspections Pertaining to "Housing" Should be Combined in a New Bureau to be Organized for Performing that Specific Function

A bureau having primary and in most instances exclusive charge of the maintenance of proper living conditions in and around all residential structures . . . should be organized as a separate administrative unit in the Department of Building and Housing.³⁰

The recommendations of this report received wide support among the civic organizations as well as within the city administration. As a result, in January, 1946, the proposed consolidation took place. The section on community sanitation in the Board of Health was transferred to the Department of Buildings as the Bureau of Housing Inspection. The result, however, was not the concentration of inspection for all housing violations in one set of inspectors because the department consisted of several bureaus, each with its own jurisdiction over certain phases of housing and building inspection.

The Metropolitan Housing and Planning Council wasted no time in advancing its ideas on how the new Bureau of Housing Inspection should be administered. Its committee on enforcement of minimum housing standards, consisting of experts in real estate, administration, social work, and legislation, issued a report in March of that year, proposing that the Building Commissioner take certain action to assure the proper integration of the Bureau of Housing Inspection and its work. Three of the committee's most important recommendations were:

B. Survey Programs

1. Block by block survey inspections in blighted areas should be made continuously on a carefully planned basis.

H. Housing Court

The establishment of a "Housing and Building Court" by name would emphasize, in the eyes of the public, the tremendous importance of the work of the Bureau and the Department.

I. The Municipal Code

The publication of a housing code in handbook form recapitulating and indexing those sections of the Code referring to existing housing is needed for the

30. *A Report on the Regulatory Inspectional Services of the City of Chicago and a Plan to Simplify Procedures*, prepared by the staff of the City of Chicago Budget Survey Committee, 1945, p. 49.

inspectors, prosecutors, the courts, the bar generally and the public. The Bureau should interest itself in satisfying this need.³¹

In general, the emphasis of the report was on better enforcement and on a change over from complaint to area inspection. The committee also was strongly in favor of better working relations among the various bureaus in the department so as to eliminate duplicate inspections. Although the recommendations of the committee were not carried out to the satisfaction of many persons, the consolidation of inspectional services within the one department was a major achievement.

Next came a health survey conducted by the United States Public Service in 1946. A section was devoted to housing,³² and the members of the survey staff spent considerable time on the operations of the Bureau of Housing Inspection. In general, the recommendations of the survey backed up previous proposals for the operation of an enforcement program. It pointed out the deficiencies of existing code provisions relating to maintenance of housing and suggested that the staff of the Bureau of Housing Inspection be increased substantially. The report also proposed using nearly twice as many inspectors for area work as for complaint inspection. The handling of court cases, a subject discussed later in this section, was also covered by the USPHS team.

The civic groups supported the findings of this survey but with little success. Although little if any change on this front has come from this survey, more support had been added to the efforts in behalf of improved housing enforcement. In 1947, due at least in part to pressure of civic organizations, ten more inspectors were added to the Bureau of Housing Inspection to handle area rather than complaint enforcement.

During the next two years efforts in behalf of better administration of the housing regulations were continued, with emphasis on planned area inspection. Alderman Robert E. Merriam, vice-chairman of the City Council's Housing Committee, introduced two ordinances; one would have created the new position of Deputy Administrator in charge of housing and the other would have extended mandatory annual inspections for a fee to all buildings in which toilets and kitchens were shared. Although proposed in 1948, the position was not created

31. *Report of the Committee on Enforcement of Minimum Housing Standards of the Metropolitan Housing Council, Outline of Recommended Programs and Techniques for the Newly Created Bureau of Housing Inspection of the Building Department*, March 31, 1946, Chicago, Illinois, pp. 6-8.

32. *The Chicago Cook County Health Survey*, Conducted by the United States Public Health Service (New York: Columbia University Press, 1949), chapter 22, pp. 389-454.

until December, 1950. This continued pushing for more and better enforcement and for improvement in the administration of the Department of Buildings led the mayor to call in Griffenhagen and Associates to study the Bureau of Housing and recommend an improved administrative organization.

One recommendation of the Griffenhagen report was to put the annual building inspections handled by the Bureau of Building Inspection under the Bureau of Housing Inspection. Another was to "Discontinue Operating the Bureau of Housing Inspection Solely 'On a Complaint Basis' and Develop a Planned Program for the Inspection of Housing in Blighted Areas."³³ More is said about this in a later section. Other suggestions dealt with adequate reporting, internal organization, centralizing of records, and other administrative devices to improve the operation of the Bureau. The report was adopted by the City Council in December, 1949.

About the middle of 1950 the president of the Housing and Planning Council made a public statement to the effect that the city could anticipate additional deaths from fires in buildings that did not meet the city's minimum standards. The statement was played heavily by the press, and further action to improve the administration of the enforcement program followed. Presumably the warning was responsible in some degree for this result.

In the fall of 1950, the Bureau of Housing Inspection instituted an inservice training program for its inspectors. It was held one morning a week for three months. The training staff included two men from the United States Public Health Service who discussed factors in the evaluation of housing and the relationship between housing and health. The inspectors were told of the city's programs for housing, planning, and slum clearance, and the relationship of enforcement to the over-all city program for redevelopment. The course also covered the reasons for the housing regulations and reviewed procedures, techniques, and interpretations of the various regulations. It had the additional effect of familiarizing the inspectors with other code provisions so that, if called upon, they could handle other kinds of violations as well.

In December, 1950, the City Council created the position of Assistant Building Commissioner with the understanding that he would be responsible for the housing enforcement program.

In January, 1951, however, the MHPC presented the mayor with a bill of particulars on respects in which the Griffenhagen report had not been effectuated. The result was an indication that an attempt would

33. Griffenhagen and Associates, *Report of the Organization and Practices of the Bureau of Building Inspection and the Bureau of Housing Inspection in the Department of Buildings*, City of Chicago, September, 1949, p. 3.

be made to put all the recommendations of the report into effect as soon as feasible.

At the time of this writing (April, 1951) it was clear that much had been accomplished in improving the administration of Chicago's enforcement program, but that much remained to be done. For example, several bureaus in the Department of Buildings have jurisdiction over code provisions relating to the maintenance of existing structures. Electrical wiring, structural defects, fire prevention, zoning violations, demolitions, and illegal alterations are still handled by units other than the Bureau of Housing Inspection. When these violations are observed by a housing inspector, he can only make note of the fact and refer it to the proper bureau. He has no power or responsibility for the referred violation from that point on. He does not follow up his notice. The situation in respect to referral would also hold for plumbing violations except that most of the housing inspectors were plumbing inspectors at one time and are members of the proper union. Thus they may correct plumbing violations without fear of jurisdictional disputes.

Gradually, however, the housing inspectors have been expanding their jurisdiction. Even in respect to matters that used to be within the jurisdiction of other bureaus the inspectors are exercising a little more authority over specific violations, getting the other bureaus to agree to allow them to handle specific items. Thus, for example, the condition of porch railings, a structural matter handled usually by the building inspectors, is now handled by the housing inspectors when discovered in the course of their regular work.

It is the jurisdictional problem that is keeping the housing inspectors from correcting many more violations than they do. The code, spelling out duties of various inspectors, also causes trouble. Even when the Bureau of Housing Inspection has specialists assigned to it, such as the electrical inspector it now has, the specialist operates on his own in the area being covered. Thus the owner or occupant is subject to visits and correction orders from two different officials.

Co-ordination has been established between complaint and area inspection within the Bureau of Housing Inspection. If a complaint is received from an area that is undergoing area enforcement, it is handled by the area inspector in the course of his regular work rather than by the complaint inspector, unless the situation is an emergency. Then the complaint inspector goes out on it immediately. This working arrangement, however, does not exist between complaint inspection in the other departmental units and area inspection by the housing bureau.

Increasing emphasis has been placed upon area inspection. The Bureau's work load has now reached the point of roughly two-thirds

complaint and one-third area, but the ratio varies considerably from time to time. For example, in the heating season, many complaints are received about inadequate heating, and area inspectors often must be shifted to complaint work to handle the increased load.

One device of considerable promise is the Central Compliance Hearing Board, which was established to hear those cases that do not comply with notices of violations. These cases are heard prior to being taken into court in order to reduce the amount of litigation. The board has been successful in securing compliance in from 50 to 60 per cent of the cases.

As to occupancy standards, the Bureau frankly admits that it is almost impossible to enforce them because of the housing shortage. It has had to let this phase of enforcement go by the board. The Bureau also cites the difficulty of determining the number of persons living in a dwelling unit because inspection occurs during the day when many of the occupants are not at home. They also say that the court will not put anyone in the street and that, therefore, it does no good to bring in such violations.

No progress has been made on the adoption of a more complete and workable housing code, but the Housing and Redevelopment Co-ordinator and the Department of Buildings are compiling the existing regulations that are applicable. No comprehensive compilation job had been done before, and thus no one really knows all the needs and conflicts of present provisions. After compilation, there undoubtedly will be a move to improve the existing regulations and to adopt a more comprehensive code.

This brief history of the housing enforcement program in Chicago adds up to rather impressive evidence of improvement in administration despite that fact that the goal of a really effective enforcement is still far away. The administrative foundation for such a program has been provided in part at least; some inspection services have been combined; additional inspectors have been added; area enforcement and improved handling of court cases, which is discussed in more detail later, have become the pattern. It is a far cry from the conditions that prevailed in 1943.

AREA ENFORCEMENT

As in the other city programs discussed earlier, area enforcement has been one of the major objectives in Chicago—witness the references to it in the civic campaigns, statements of officials, and the reports summarized. Two issues or questions, however, deserve at least a little more discussion in light of the Chicago experience than they have received so far in this section.

The first concerns area selection. What criteria are used in selecting

the areas that are to be inspected? Is the choice of these consistent with or a part of some comprehensive redevelopment program, however embryonic it may be?

In general, the Chicago practice has been rather good in this respect. The areas are selected by the Bureau of Housing Inspection but the Bureau has been guided by considerations outside its own orbit or preferences. Thus the initial selection is based upon that part of the general plan of the city that classifies areas by their housing characteristics. The districts considered are those that the plan classifies as rehabilitable through housing code enforcement. In addition, the Bureau consults with the land acquisition agencies in the city—the Chicago Housing Authority, the Land Clearance Commission and with the Plan Commission and the Housing and Redevelopment Co-ordinator as well. It also appraises the racial relations situation in the areas under consideration. And finally it consults with neighborhood groups before deciding upon a definite area.

This method of selecting areas for code enforcement does join the program together with other redevelopment activity of the city. Quite possibly more thorough preparation for the final selection would be worthwhile, but one cannot expect the program to meet all the desirable criteria when it is, in effect, just getting started.

The second question stems from area selection. What kind of enforcement, if any, should be practiced in areas slated for early clearance by the city? This question involves two subjects: (1) enforced demolition of buildings in clearance areas and (2) degree of enforcement of minimum standards in such areas.

On this first subject, the Metropolitan Housing and Planning Council suggested a procedure designed to reduce the acquisition cost of property in clearance areas. The land acquiring agencies, prior to negotiation for purchase or start of eminent domain proceedings, should notify the Department of Buildings of any area to be acquired. The department in turn would inspect all buildings in the area and report on all violations discovered. "Where property is in such condition as to warrant condemnation, the owners should be so notified and instructed to vacate the premises, and demolish the structure, leaving the land clear. Such orders should be recorded in the Office of the Recorder of Deeds, and would act as a cloud on the title until corrections were effected."³⁴

The statement pointed out that the savings to the city under such a program would be considerable. It also included the following proposal: "Where structures are overcrowded, orders should require re-

34. Metropolitan Housing and Planning Council, mimeographed statement, June 25, 1948, p. 3.

duction in occupancy, and purchase prices should be predicated on legal and not illegal standards of occupancy, irrespective of the income which the structure may have yielded before the city attempted to enforce its legal requirements."

The second subject under the heading of enforcement in clearance areas is the degree to which code standards should be required. One contention is that enforcement across the board would only result in increasing the cost of the properties to the city when the time comes to acquire them. This, however, cannot be the only consideration. The safety of the residents of such areas would seem to require some kind of basic enforcement. The Chicago health survey had some specific recommendations on this problem that seem quite sensible:

It is proposed that the Chicago City Council develop an objective method of scoring housing deficiencies by means of which areas could be classified according to the degree to which they are substandard. The resulting classification would provide the council with information as to the extent of the housing problem and enable it to make plans for intelligent action. A five- to ten-year clearance program could then be undertaken in the worst areas. During this period owners of buildings in the area should not be required to make extensive structural changes which might add to the cost of property to be purchased for clearance.

As a means of determining the extent to which violations reported in substandard areas should be corrected, it is proposed that all violations be divided into three classes: (1) nuisance violations; (2) modified structural violations of vital health significance; (3) relatively nonhazardous modified structural deficiencies and extensive structural violations. During the proposed survey, nuisance violations, such as improper disposal of garbage, defective plumbing, broken windows, and rat infestation, should be corrected. Enforcement of violations in the other two classes should be postponed until the area is appraised completely. The degree of enforcement would then be determined by the type of area in which the structures under consideration were located. In an area subject to immediate clearance, highly selective enforcement of structural violations would be recommended; and in the areas to be cleared within a few years, corrections would be limited to hazardous structural violations.³⁵

Unfortunately this recommendation has not been put into practice.

HOUSING COURT

Through gradual changes in the operation of one of the branches of its municipal court, Chicago has created a housing court somewhat similar to Baltimore's. Again, a great deal still must be done before this housing court functions as it might, but even so it marks an advance.

As of 1943 the court procedure for handling housing violations could not be called the best method of securing swift and sure justice for violators. Chicago has thirty-six branches of the municipal court and a policy of rotating judges among the branches at frequent intervals.

35. *The Chicago Cook County Health Survey*, p. 437.

Assignments are made each month although this does not mean that each judge changes his court each month. In 1943, the branch of the court handling housing violations was the license court. It also heard what were usually thought of as odds and ends of the cases coming before the municipal court, including license cases and smoke violations. The room itself was undesirable. The health survey had this to say about conditions in the court:

Assignment to the bench in this court is not particularly attractive because of the large number of cases and their "nuisance" character. The cases tried in the license court include violations of the code as it relates to fire, health, building, and electrical provisions. In addition, certain cases, such as failure to obtain a boiler inspection license, and garbage and refuse violations are referred to this court.³⁶

The attitude of the court and the city prosecutors in 1943 was emphasis upon compliance rather than punishment of the violators. On this point the same report had this to say:

A desire on the part of the judges to be liberal with the electorate and, perhaps, during the recent war a recognition of the scarcity of labor and materials have given rise to what is known as the "compliance system" in the municipal court. The philosophy of this system is that compliance with the law is preferable to punishment of the guilty. Under this theory the violator is heard in court and given every opportunity to comply with the violated provision. In general, so long as he promises compliance, an extension of time is granted. As a result of this practice, cases are continued many times—occasionally as many as fifteen to twenty. Such a system has increased the load on the courts and has seriously impaired the effectiveness of the enforcement agency's final recourse in obtaining correction of violations.³⁷

This situation hardly made for an effective enforcement program. Efforts to obtain improvements have been partially successful.

One of the first changes was a reduction in the kinds of cases coming before the court. The license cases other than those dealing with housing and the smoke violation charges were siphoned off into a cafeteria court. This eliminated a great many cases, and permitted the court to concentrate its attention primarily on housing matters.

A second improvement was the movement of the court to much better physical surroundings. The old courtroom had been small and inadequate. The new one was much more impressive and provided additional room necessary for the number of cases coming before it.

Further, the chief justice, who assigns the judges to the various courts was asked to lengthen the tenure of the judges sitting in the license court. This he agreed to do and now one judge remains for three to six months. This is not a completely satisfactory arrangement,

36. *Ibid.*, p. 424.

37. *Ibid.*, p. 424.

however, for it does not permit one judge to become thoroughly familiar with housing cases or to become "an expert in the field."

The next improvement was also gradual. Slowly the court began turning from its compliance philosophy to a trial for innocence or guilt. This was very important for it meant that a violator could no longer look forward to continuance after continuance but instead could expect to be fined for his violation. Fines also tended to be somewhat more nearly commensurate with the violations. Some improvements have been noted also in the preparation of cases by the Department of Buildings and their presentation in court by the city prosecutor.

The latest and most important development, however, has been the designation of the court as a building and housing court. Two days of each week are now set aside to hear these cases. Housing cases are heard on Monday; and building, conversion, and structural safety violations are heard on Tuesday.

Thus Chicago now has the beginnings of a housing court, although, as on the related fronts, there is still much room for improvement.

. RESPONSIBILITY FOR RELOCATION

An effective enforcement program requires that some families must move, either because the structures in which they have been living are to be closed or demolished or because occupancy standards have been violated. In a tight housing market, upholding these code provisions is next to impossible unless other quarters are found for the occupants or some assistance given them in locating other quarters. Certainly the basic principle is the same whether the families are ousted by a clearance project or as the result of code enforcement.

Chicago recently began a campaign to force the demolition of those alley dwellings in such a deteriorated state that they constituted fire traps. This move came about as a result of several disastrous fires in such dwellings in which a number of people lost their lives. The Department of Buildings agreed to check on such buildings and then to take steps to have them demolished or vacated. It was agreed, however, that before the buildings were actually ordered demolished, the families occupying them would be relocated.

The job of relocation was given the Housing and Redevelopment Co-ordinator who is also responsible for the relocation operations in connection with acquiring land for a superhighway,³⁸ the Medical Center program, and the Board of Education.

This appears to be the only instance (or, at least, one of a very few)

38. For discussion of this and other phases of the Chicago operations on this front see in this volume Jack Meltzer, "Relocation of Families Displaced in Urban Redevelopment: Experience in Chicago."

in which a city administration has taken upon itself the responsibility for relocating the families displaced because of code enforcement. It is a notable step, and one that seems essential in many common circumstances if an effective enforcement program is to be undertaken.

Chicago, however, has not accepted full responsibility for relocating all families displaced in this way. So far the official help is available only to those families occupying fire-trap alley structures, by and large the worst buildings in the city. The responsibility has not been extended to families affected by application of occupancy standards or by the demolition of other kinds of unfit dwellings. In fact, the Bureau of Housing Inspection is hindered in putting occupancy standards into effect by the difficulty of families finding other places to live. Presumably this condition will continue until either the housing shortage is relieved or city officials see their way clear to handle relocation for occupancy enforcement as well.

THE PROGRAM AS A WHOLE

The development of the Chicago program has been so gradual that it has gone almost unnoticed by its citizens and certainly by other cities. In the space of eight years, however, this city has put together many of the elements that characterize an effective enforcement program. It has area enforcement. It has one, but not the most efficient, kind of combined inspections. It has a housing court. It has developed an administrative organization to handle the work. It has increased the number of its inspectors. And it has assumed the responsibility for relocation in one phase of its program. All of these developments of the past few years need strengthening and extending.

Much of the credit for Chicago's program goes to civic organizations and to the city administration. The leading civic group in this operation has been the Metropolitan Housing and Planning Council of Chicago. It has shown what an active and informed citizens' organization can do in behalf of better local administration of police power measures related to redevelopment.

CHAPTER III

REHABILITATION AND CONSERVATION—STUDIES AND A LITTLE EXPERIENCE

SEVERAL more or less thoroughly prepared proposals for rehabilitating areas have been published or otherwise described in some detail. Their common aim has been to arrest what seemed to be an ever increasing blight in an urban district or neighborhood or to lessen its threat for some time to come. Proposals for four districts in four cities were chosen for examination here. Again, although this subject has not had nearly the attention it merits, these are not the only examples that could have been used. They do, however, give a fair view of the ideas and analysis being worked out for districts of this kind. Omitting other studies and projects does not mean that they were thought to be inferior.

The four covered in this chapter are (1) Waverly in Baltimore; (2) Woodlawn in Chicago; (3) Dwight-Hanson Streets area in Boston; and (4) the American Friends Project in Philadelphia. Only the last of these four proposals has actually been undertaken, and it is on a very small scale. The other three are studies—all of them made well before urban redevelopment as it is becoming known today was more than a subject of preliminary exploration, discussion, and debate.

WAVERLY

Waverly, an area in Baltimore, has become well known among urban planners and redevelopers through the survey report on it made in 1940 by the Federal Home Loan Bank Board.¹ In the words of the report, the study sought "a simple and practical preventive program by means of which vigilant groups of home owners can reverse community disintegration before it attains a definitely destructive momentum."² In the terms used here Waverly was a conservation rather than a rehabilitation area. The plan for it, however, does contain elements

1. *Waverly, A Study in Neighborhood Conservation* (Washington, D.C.: Government Printing Office, 1940). Most of the study was done or directed by Arthur Goodwillie under the general supervision of Donald H. McNeal, Deputy General Manager of the Home Owners' Loan Corporation.

2. *Ibid.*, p. viii.

of rehabilitation. It is worth examining as one of the early documents that recognized the need for attacking blight on an area basis even when it had not gone far enough to justify clearance and rebuilding or even area rehabilitation.

As to the physical character of the area when the Board's staff studied it, the report stated unequivocally that "while it includes some badly depreciated spots—*it can in no way be classified as substandard.*"³ It further characterized the area as one that "almost entirely is comprised of moderate-sized, single-family homes that, in room and total cubage, are the equivalent of those for which there is a present-day market; . . ."⁴ but pointed out, however, that "although the Area contains numerous well-maintained dwellings, definite indications of a downward trend can be observed in many scattered blocks within its borders. . . ."⁵

Partly because Waverly includes much more than buildings to be rehabilitated, it is primarily a planning district in which enforcement of police power measures, education, some rehabilitation, a little clearance, and the provision of additional public areas and facilities are the tools recommended for its redevelopment. The study of it is an example of area planning—preparing a physical redevelopment plan for an area tied in with an action program for reaching certain goals. Its analysis, therefore, has value beyond the conservation and rehabilitation measures proposed. It is worth examining because, for the area covered, it is a fairly broad and balanced rather than a project approach to redevelopment.

The decline that the Waverly plan attempted to halt could not have been dealt with solely or even primarily by applying a set of minimum standards under the police power. Most of the area was considerably above the minimum standard level. Instead, the plan was to persuade the property owners to take the necessary steps to bring their buildings and district back to the conditions at which it had started or at least close to them, except, of course, for some unavoidable depreciation and obsolescence. It was, therefore, a cross between rehabilitation and the application of a set of above-minimum standards by means of persuasion and neighborhood pressure. The report put it as follows:

The proposed preventive treatment is designed, rather, for those older neighborhoods which have not yet approached slum status but in which the sinister effects of age and obsolescence are beginning to gain so disruptive a momentum that—unless their present chart line is definitely improved—they will eventually be carried below the limit of normal usefulness and beyond rescue, by either individual or collective effort.⁶

3. *Ibid.*, p. 8.

4. *Ibid.*, p. 8.

5. *Ibid.*, p. 8.

6. *Ibid.*, p. 5.

And later on—

The prompt reconditioning of every home in need of minor repair, the immediate restoration of every deteriorated house to a definite *Area standard* [emphasis added] and the subsequent maintenance of all structures at that standard, is the minimum requirement for successful resistance to the slow and relatively obscure disease that now threatens the future social and economic integrity of Waverly.⁷

The area itself was predominantly residential, 98.8 per cent of the buildings were used for residential purposes. Of the 1,629 structures in the district, approximately 100 of them “need more or less extensive reconditioning and remodeling, to counteract the physical and functional depreciation which has taken heavy toll of them. Unless reasonably prompt action is taken to bring them up to the average of the district, at least as to physical condition, they will not only adversely affect property values in their immediate neighborhoods but will also constitute increasingly dangerous blight-infection foci, menacing the entire body of the district.”⁸ These one hundred structures, therefore, constituted a rehabilitation job as defined in this monograph. The action proposed for the rest of the area was to improve it as a whole and to safeguard the additional investment made in the one hundred units to be rehabilitated—essentially a conservation operation.

The area redevelopment plan called for by the study included rather extensive action by the city. Thus, replatting in some cases was suggested, zoning changes were also recommended, play areas were laid out, and in general, it was proposed that the city concentrate a considerable activity in the area. Too often it is forgotten that municipal provision of community facilities is an essential part of nearly all redevelopment programs. Without city co-operation in this respect, a redevelopment plan for almost any area falls short of its possibilities.

It was recognized also that some sort of directing agency was needed to see that the plan was carried out. “. . . Only co-ordinated action, pursuant to a carefully prepared and technically sound plan, either by a considerable group of owners acting jointly or by a single owner or agent in control of an extended group of housing units, will assure the restoration of those former standards of maintenance which are necessary if decline in rental and sales values and the infiltration of a progressively undesirable type of occupant [*sic*] is to be halted.”⁹ The central agency that was proposed and later organized to carry out the

7. *Ibid.*, p. 58.

8. *Ibid.*, p. 11.

9. *Ibid.*, p. 55. Here should be pointed out plainly what has been implied elsewhere—that neither the writer nor officials of URS necessarily share in nor indorse all of the views expressed in this and other studies and proposals. This warning applies both to questions of analysis, judgment on measures and issues of public policy.

redevelopment plan was not a city department but a co-operative organization called the Waverly Conservation League. The Home Owners' Loan Corporation was instrumental in forming it. The League sought widespread membership throughout the area and was to organize its membership on a block basis.

Prior to the organization of the League the publicity and activity of the survey itself resulted in some fixing up by home owners in the district. The report referred to this fact: "The volume of repair, reconditioning, remodeling, and landscaping which has been completed throughout the Area during the past few months—even prior to the complete mobilization of community effort—greatly exceeds that for any like period in recent years. . . ."¹⁰ The report cited other evidence of the salutary effect of the survey and proposal. Two unsightly land uses were removed; new construction was undertaken; and the loans repaid in full to the HOLC nearly doubled. Although the board's plan did have some effect upon the improvement of property in the area, co-operative action through the neighborhood association was not strong enough to bring about the kinds and volume of conservation and rehabilitation that the study envisaged.

The report also had two other suggestions besides the neighborhood organization for securing improvement or rehabilitation. The first of these was a municipal conservation department. As proposed, this department would not undertake rehabilitation jobs itself, but it would serve as an advisory agency and an organizer for neighborhood action. In the words of the report:

To this end, the projected department would stimulate the formation, in selected areas, of property owners' associations designed to carry conservation projects forward, pursuant to its own carefully prepared program. Thereafter, it would foster the continuing and aggressive interest of these organizations in the preservation of their neighborhood standards, by promoting annual "clean-up, paint-up, and fix-up" campaigns and by conducting intra- and inter-area fairs, exhibitions, and awards for outstanding individual, block, and district excellence in maintenance, embellishment, rehabilitation, remodeling, gardening, landscaping, etc. It would make available to the individual home owner, through his neighborhood organization, technical information (a) on the planning of rehabilitation and (b) on the selection, cost, and proper application of materials and equipment, in connection with his maintenance efforts. It would introduce economies through the mass purchase of materials and through group contracts for maintenance, painting, repair, and fuel. It would supply informed and sympathetic representation when matters in which the neighborhood is interested are being considered by the municipality or one of its agencies. And it would undertake numerous similar activities, which only the salaried staff of a municipal department, whose field of action embraces an entire metropolitan area, can effectively inaugurate and administer.¹¹

10. *Ibid.*, p. 58.

11. *Ibid.*, p. 65.

Although some parts of this proposal may now seem somewhat impracticable, it has the essence of the kind of action a city must take if it is to improve those areas in which most of the structures are above the minimum standards of the various ordinances and codes. Municipal action of some sort is necessary, although it would seem that more direct action than the type of municipal department advocated in the study may be required.

The second of the two proposals was use of what the study labeled "beneficial restrictions." The study reviewed the effects of restrictive covenants and suggested that, if at all possible, such covenants should be adopted in those areas in which rehabilitation action is being taken. The last paragraph on this subject reads:

While the noteworthy degree of *individual restriction for collective benefit* which has thus been so advantageously applied, cannot easily be established in previously developed communities like Waverly, the effective protection against undesirable infiltration, [sic] improper land use, unattractive street pictures and initial blight infection which such restrictions provide, warrants any reasonable effort that may be required to secure their voluntary legal assumption by coherent residential groups in that Area, to the fullest extent possible.¹²

The basic idea of covenants to preserve the physical qualities of an area, keeping it above the minimum standards set by the city, seems worth further consideration. Municipal action at this level appears difficult, but action by the neighborhood, perhaps with assistance and stimulation by the municipality, could do much to achieve results the city is now unable or unwilling to undertake on its own. Covenants provide a means of accomplishing some ends beyond the present reach of the police power. Charles S. Ascher has discussed the place of covenants in urban redevelopment in another URS monograph.¹³ His analysis of covenants and their use is relevant to this particular situation.

The Waverly report has been reviewed here as evidence that the problems of area improvement have been recognized for many years and that some proposals to this end are not new. What, however, is the most effective combination of planning, organization and action for a particular area? The Waverly proposals did not accomplish their ends; more direct action of some kind now seems to have been required. A municipal corporation with powers of eminent domain and working capital might be the answer for the direct rehabilitation required in an area. Covenants might be the answer for maintenance of buildings at standards higher than those that apply city-wide. Many of the powers to plan such areas for better living and to provide the necessary com-

12. *Ibid.*, p. 66.

13. Charles S. Ascher, "Private Covenants in Urban Redevelopment," pp. 221-309 this volume.

munity facilities are already in the hands of the municipal governments. Usually, however, they have not been used to the extent they might nor have the plans assured the degree of joint or combined action by public agencies that is necessary to give a conservation or rehabilitation operation real momentum and effect.

WOODLAWN

A more recent proposal for the redevelopment of an area through rehabilitation is the one put out by the Chicago Plan Commission for Woodlawn, a community on the south side of Chicago.¹⁴ As stated in the report itself:

The purposes of the Woodlawn report are to analyze the problems common to most of the middle-aged Chicago residential areas and to propose a plan of action for community revitalization and improvement. The study outlines the successive steps that can be initiated by individuals or groups of private property owners, with the aid of public agencies, to arrest the gradual deterioration of these areas and cause them to remain desirable places in which to live. It is of compelling importance to the future welfare of the entire city that these older, or "Conservation," areas in which over 51 per cent of our population is now housed, be prevented from depreciating into a condition of near-blight or blight.¹⁵

Woodlawn is an area of a little less than a square mile on the South Side of Chicago just south of the University of Chicago and the Midway Plaisance. It is separated from Lake Michigan by Jackson Park. Its population in 1940 was about 51,000—at a population density of about 91 persons per gross acre. Tenancy is high; more than 43 per cent of the people in the area in 1939 lived in furnished rooms. More than 62 per cent of the buildings of all kinds in the area were put up before 1903; more than 82 per cent before 1912. Compared with other districts of the city it has excellent transportation facilities—both mass transit and motor.

The primary emphasis of this report was on the community facilities needed in the neighborhood. It put together an impressive list of those items that should be provided to further the redevelopment of the Woodlawn community. Most of them only the city could provide. In fact, one of the aims of the study was to determine "the current needs of neighborhoods in Conservation areas for (a) park and play space

14. Chicago Plan Commission, *Woodlawn, a Study in Community Conservation*, July 1946. The study was initiated by the Woodlawn Planning Committee of The Associated Clubs of Woodlawn, Inc. As the Introduction puts it: it was "inspired by the officials of the University of Chicago. . . ." The southern edge of the University's campus is at the northern boundary of Woodlawn. The HOLC contributed the services of Robert B. Mitchell, then on its staff, who outlined the study and directed its earlier stages before becoming executive director of the Philadelphia Plan Commission.

15. *Ibid.*, p. 4.

for all age groups, (b) adequate school facilities, (c) the elimination of nonconforming, unsightly, or hazardous land uses, (d) protection from traffic dangers, (e) improved transit facilities and services, (f) off-street parking and storing of automobiles, (g) additional police and fire stations, (h) zoning changes, (i) public buildings for health and other governmental services, and (j) street trees and other improvements that will add to the appearance of the community.”¹⁶

The report translated these general aims into the specific community facilities needed in Woodlawn, and devoted a section to nearly every one of the items listed above. A strong case is made for holding that the provision of these facilities would do much to improve the community. One of the chief contributions of this report, in fact, is its demonstration of the importance of proper and adequate community facilities in the redevelopment of an area.

Although much of the report is a discussion of community facilities, one section takes up the problems of rehabilitating or, in our terminology, reconditioning buildings. It recognized that little could be done in regard to the placement of structures on their lots and their relations to each other. On the problems presented by these features of obsolete site planning the report only suggested that “such faulty relationships between buildings should be corrected as individual structures are remodeled or replaced.”¹⁷ This is hardly a solution, but it is hard to see what else could be proposed on these points for areas of this kind. (As to buildings obviously too far gone to be rehabilitated, the report proposed that “By a selective process the substandard and economically unfit structures should be weeded out.”)¹⁸

How is the rehabilitation and improvement of buildings to be assured in an area of diverse ownerships? Here the Woodlawn report proposed a scheme in essence much like Waverly’s but differing from it in some important respects:

In the final analysis, the conservation program can only be accomplished through the cumulative efforts of individuals, but it also requires a group standard, group procedure, and group responsibility. Usually, the owner of a single structure in a deteriorating area is not well advised in making a large investment for major improvements. On the other hand, if a standard can be agreed upon and co-operative action assured by a majority or by all of the owners in an immediate vicinity, confidence in the security of investment can be achieved.

Preparation and acceptance of a block improvement plan in conformity with the overall conservation program is one of the first steps toward effective group action. Thus, the common goal toward which property-owner groups may direct their efforts is established. Such groups, composed of the owners in each block, could

16. *Ibid.*, p. 4.

17. *Ibid.*, p. 68.

18. *Ibid.*, p. 69.

then determine the work to be done, individually and collectively, and the standards to be established in their block.¹⁹

Further, if the community is primarily responsible for rehabilitation, then the community organization should provide technical assistance to individual owners: "The services of an agency qualified to make planning studies for groups of buildings or blocks, remodeling plans, and economic and financial analyses should be employed by community improvement associations to counsel individuals, block organizations, and property management."²⁰ The only city action on this front proposed by the report is consultation and advice by the City Plan Commission.

Before undertaking conservation and rehabilitation operations the area should be analyzed to determine the condition of each building. The structures then should be placed into four categories, the criteria for each to be based upon the degree of rehabilitation required. The report also suggested the type of rehabilitation operation for each category.

In the first class are the buildings that "have acceptable plans, furnish reasonably satisfactory housing, and are in fair or good condition."²¹ The action needed is just good maintenance and modernization of equipment.

The second category consists of those structures that need "minor plan changes, repair work, and new heating, plumbing or electrical equipment."²² Rehabilitation of these buildings requires changing the plan, moving partitions, creating more usable apartments, etc. The report observed that "the greatest opportunities for building conservation lie in this class."²³

In the third class are those structures the plans of which are obsolete but that are still susceptible to change even though the cost would be fairly great. Large apartments would be converted into smaller ones; the remodeling would be rather extensive. The report said that "The border line between justifiable and uneconomic conversion falls within this class."²⁴

The fourth class of buildings are those that are too good to demolish but that, because of their condition or layout, are too expensive to rehabilitate. Nothing can be done for them, according to the report, except to maintain them as well as possible, give them good management, and wait patiently for their eventual demolition.

19. *Ibid.*, p. 69.

20. *Ibid.*, p. 71.

21. *Ibid.*, p. 70.

22. *Ibid.*, p. 70.

23. *Ibid.*, p. 70.

24. *Ibid.*, p. 70.

To many persons who know Woodlawn well, the Plan Commission's report seems a good analysis and a useful scheduling of what should be done to conserve and rehabilitate the neighborhood or district. The proposed community facilities would help materially; the suggested rehabilitation of the various types of buildings also makes sense.

The program (if that is the proper word) that followed the report has been a disappointment, to put it mildly. At least three factors seem responsible for this sad result. One has worked after and largely outside the scope of the study; the other two are inherent in the report itself.

The first is the fact that so far the city has undertaken very few, if any, of the community facilities called for in the area plan. Largely through the efforts of the present alderman, Robert E. Merriam, one ingenious partial street closing has been carried out. (It stops traffic at a minor street intersection but will permit fire trucks or other official vehicles on emergency errands to go through if necessary. It also adds a little more parking area and a bit of green space in a rather drab district.) In effect, the city, after exhorting the citizens in the area through its Plan Commission to rehabilitate their properties, has sat back and done little or nothing on that part of the program that only it can provide. Of course, no responsible official or municipal body legally obligated the city of Chicago to go ahead with all or any of the public improvement called for in the report. Also, postwar inflation, the usual poor tax and credit base, and the absence of an over-all city plan that would include time priorities for such public works both in Woodlawn and elsewhere have all militated against doing what was proposed. But this is poor consolation to the people of Woodlawn as well as to citizens in similar areas who would have taken heart at some real show of results there.

The Woodlawn program has also disappointed its advocates because the report did not stress that community action of the type advocated is extremely difficult to bring about. Exhortation is not enough. Actual results require tireless work by many people in the community and effective leadership by those who have both a basic knowledge and belief in the plan and some followers to lead. It probably is too much to expect the kind of community action the report foresaw. Something more positive is needed. This is not to deny the importance of community action and participation in a redevelopment plan. (Another part of URS has a chapter on the place of community organizations and participation in the redevelopment process.)²⁵ It is to say, however, that more than exhorting the community to take action is needed,

25. See "Urban Redevelopment and the Urbanite," by William L. Slayton and Richard Dewey.

not as a substitute for community organization but as a supplement. Municipal action of some positive and direct kind is required. Here again one can see the potential value of graded standards of building maintenance and equipment, adequate enforcement, city-wide planning that gives serious attention to neighborhood improvements—including their financing, and acquisition and demolition of the worst buildings by the appropriate municipal agency both to decrease densities and to remove sore spots.

Finally, the Woodlawn study was very weak on one other most basic point—the probable effects on property owners, tenants, and the area as a whole of higher rents due to additional capital and maintenance expenditures of the rehabilitation program. The question was mentioned (p. 69) but dismissed very briefly and almost smugly. Quite clearly, when the time came for action this issue did not stay dismissed.

BOSTON—DWIGHT-HANSON STREETS AREA

Also in 1946, the Boston City Planning Board published a report analyzing the possibilities of rehabilitating an area near the center of the city.²⁶ This study covered a very small area—about six acres—and was limited to a specific rehabilitation scheme. It was not a redevelopment plan for a community. The analysis went into detail on the financial feasibility of the project and on the specifics of the rehabilitation operation itself.

The report has this general statement on the type of analysis that should be made in determining whether an area should be rehabilitated or, if not, to use the term of the report, reconstructed:

As time goes on, all housing passes through a cycle of construction—upkeep—repair—deterioration—obsolescence—destruction—and again construction.

Each neighborhood has a *best range* of cost and kind of service within which this inevitable cycle should take place. If the *best use* of the area is residence for a certain rental range, then—before the deterioration goes so far as to cause some *other (and less desirable) use*—neighborhood-wide rehabilitation or reconstruction should be put in motion.

If at this point *the original use* is still the best future use, or if the future use is uncertain and much value still remains in the structures, the *rehabilitation* should pay by extending this potential use for the economic life of the improvements, at least. If however, a *changed use* is called for at once by the comprehensive *plan*, then reconstruction for this changed use will pay better, because the long period of its amortization will be a period of demand for the new use.

If the structures are worthless, then reconstruction on a new plan is presumably the only possible improvement, whatever the proposed new use may be.

26. The Boston City Planning Board, *Rehabilitation in Boston, A Progress Report on Reconditioning*, Volume III, January 1946.

This careful prediction of the probable best use of a given location is not only a part of the service of the Planning Board to the City as a whole, but also a service to the private interests thinking of making investments in the area. The Planning Board should be a competent judge of trends of use, having the most comprehensive data before it.²⁷

The Planning Board applied this type of analysis to the Dwight-Hanson Streets Area, and came to the conclusion that rehabilitation would be justified. Data from the 1940 Census were assembled on the characteristics of the area, its population, land use, and condition of the structures, with other information on their structural soundness from special investigations. The area consisted of large, old, single-family houses that had been made over into rooming houses primarily for single persons of fairly low income. As to the structures themselves:

The exterior shells of about all the buildings now on this area are sound and solid. The exceptions are only those where the owners have been so long discouraged that they have not continued any adequate upkeep or maintenance of the walls, windows and roofs of the structures,—and also the one or two that, being left open, have been vandalized. There are further a very few where partial settlements have opened some masonry joints,—but not as yet in locations where the deterioration has become vital. On the exterior, then, some of the sash and perhaps frames need replacement; the brick-work repointing, the roof or its flashings replacement or patching.²⁸

The structures had been misused and living conditions were not good. Some owners had erected frame additions at the rear to provide extra rooms and these “so cut off the light from the rears of the houses and so crowded the alleys that while the fronts are still self-respecting, the rears and the alleys give every appearance of a discouraged slum.”²⁹

The proposal of the Planning Board was to continue the use of the area for rooming-house purposes and to keep the rehabilitation expenditures down so that rent levels would not be increased by more than 10 per cent. As the report put it: “The problem is to decide what improvements—physical, economic, regulative, managerial, or legislative—can be undertaken to produce the above results, without putting upon any class of people concerned a greater financial burden than, *in the long run*, the good results will warrant.”³⁰ The study showed, however, that even with the increases kept to 10 per cent, some 16 per cent of the residents probably would still have to move from the area.

27. *Ibid.*, pp. 66–67.

28. *Ibid.*, p. 26.

29. *Ibid.*, p. 27.

30. *Ibid.*, p. 29.

The rehabilitation plan included the demolition of "some of the most deteriorated buildings with excess building coverage . . . in order to open up the rear yard areas in the vicinity, thereby giving considerably more light and air to the remaining buildings, and securing better health conditions for their inhabitants."³¹ The backyards were also to be cleaned out under the proposed plan. Fences and wooden additions were to be removed to permit the creation of a common open space. Needed community facilities were also included in the plan—additional recreation areas, a change in zoning, changes in the streets.

The rehabilitation of the structures themselves included the provision of additional bath facilities in each building plus washing facilities in nearly every room in order to reduce the number of additional bathrooms. Many of the structures required extensive repairs to their plumbing and heating systems, and nearly every house needed a considerable amount of floor sanding, repainting, cleaning off old paint and similar work. The original floors and interior finishes of these structures, however, were very good and the amount of work necessary to restore them was not great.

This was the scheme. The problem then was to devise a method for carrying it out. The Planning Board immediately saw the difficulties and weaknesses of unsupported co-operative community action:

It is not believed to be possible that the proposed plan, or any plan comprehensive and efficient, can be carried out by the diverse actions of separate owners, nor indeed by the undirected uncompelled cooperation of all the owners. Some machinery must be set up, producing a result financially satisfactory to the great majority of the owners and equitable to every one of them, whereby the commonly desired improvements may be effected by a commonly accepted single agency.³²

The proposal the Planning Board hit upon was the purchase of the area by an urban redevelopment corporation. It was recognized that the power of eminent domain would be necessary if the whole area were to be acquired at anything like a fair price. The corporation would carry out the rehabilitation plan, and manage the property. It would receive a tax freeze as an inducement. As the Planning Board estimated the financial arrangements, the corporation would find that "at the end of twenty-seven years and seven months its stockholders will have amortized their borrowings with interest, paid themselves dividends on their equity, paid state and local taxes according to the Act (Urban Redevelopment Corporations Act), paid Federal Corporation taxes at the present high rate, and will then own the property."³³

31. *Ibid.*, p. 29.

32. *Ibid.*, p. 46.

33. *Ibid.*, p. 47.

In somewhat more detail, the report concluded that such a corporation within the twenty-seven years and seven months would be able to

- (1) Amortize its borrowing of 80% of the capital costs, i.e., excluding upkeep, replacement of furnishings, etc., with interest and insurance.
- (2) Pay "frozen" taxes according to the new law.
- (3) Pay 4% interest to its stockholders on their holdings of the rest of the initial cost.
- (4) Earn a "current profit" to stockholders of \$4,358 per year, which in effect would increase their dividends from 4% to 5.9%.³⁴

These estimates, of course, were based on costs before the post-War II inflation. Today the prospects of substantial improvement within a 10 per cent rent increase would be much less bright. On the other hand, the allowable rent rise probably could be raised a little. Even so, no one should accept the results of the earlier estimates as a guide to today's possibilities.

The Boston study, however, is a genuine though limited contribution. Quite probably there should always be pilot projects of this kind that remain on paper rather than reach the building stage. This analysis certainly gives support to the hypothesis that rehabilitation does have a place in redevelopment programs and that cities may be able to provide housing, acceptable housing, for middle- and lower-middle-income families at the same time they are making full use of the capital represented by old but sound structures.

PHILADELPHIA—AMERICAN FRIENDS

The American Friends project in Philadelphia is an actual rehabilitation job that is going ahead. It is about the only project in this category and for that reason alone should be watched closely by urban planners, housers, and redevelopers. Although many persons have taken part in the pioneering work in this undertaking, it is due in substantial part to the Friends Neighborhood Guild, a settlement house in the area, of which Francis Bosworth is executive director and Charles Perry is community worker.

The project is part of a plan for the redevelopment of the East Poplar Area, which contains sixteen blocks of which six are to be rehabilitated.³⁵ The remainder will be cleared for public housing or community facilities of one sort or another. Thus the Friends' site, which is only one block, is not an isolated one; it is part of an inclusive redevelopment plan for the area as a whole. It will benefit by the work of the

34. *Ibid.*, p. 51.

35. Philadelphia City Planning Commission, *East Poplar Redevelopment Plan*, City of Philadelphia, August, 1948.

city in making the whole area more desirable. The city already has begun acquiring a block-wide strip to serve as a greenbelt between the redevelopment area and adjacent railroad tracks. Some of the structures have already been demolished. The city has also completed a playground for the area. The relationship of the Friends' one-block site to the redevelopment area as a whole is important, because if the surrounding area were not to be redeveloped as well as the single block, the project would probably never have gone ahead. Even if it had, its value would have been considerably reduced. In fact, the American Friends would not have agreed to proceed with the project unless the city had undertaken to provide the necessary community facilities and to see to the redevelopment of the rest of the area.

The project itself has been rather well described in a recent magazine article.³⁶ The costs have been increased since the article was written, but the illustrations and plans present an excellent outline of what is proposed.

The block as it now exists has twelve buildings, most of them very large double houses—many with twenty or more rooms—built shortly after the Civil War. The structures are basically sound; the walls were built to last for generations and they have. The FHA office has tested the structures to make sure of their soundness, and is convinced that they are worth rehabilitating. The proposal is to remodel these structures into 100 apartments. Some 114 families now live in the buildings. Each apartment will have much more living space than is provided by most apartments being built at the present time. The rooms will be spacious, and little changing around of walls will be required. The structures will require extensive modernization as to the floors, plumbing, heating system, windows, etc. The walls are the parts of the structures that are most worth saving.

The project also includes the erection of one new building and the demolition of two old structures. One of the buildings to be demolished is too far gone to warrant rehabilitation. It will be replaced by the modern building, thus giving the rehabilitated structures something more to tie to than themselves. The second building to be demolished is an ice-cream factory. It is not suitable for rehabilitation, and nothing will be rebuilt on its site. The space it leaves will be used for a play area or small park within the block.

The block also includes one structure that will be rehabilitated but not into dwelling units. It is now a hall and meeting place and will be used as a community center. Some of the rehabilitation is to be done by self help (i.e.), by members of the families that are to live in the

36. "Philadelphia Slum Modernization," *Architectural Forum*, (October, 1950), pp. 172-5.

apartments), and this building will be used during the remodeling period and perhaps beyond it, if the rehabilitation program catches on, for woodworking and other classes to instruct the residents in skills needed for parts of the rehabilitation job. Residents will make cabinets, cupboards and millwork, waterproof basements, and paint interiors. Building trades unions have agreed that their members could instal the units made by the co-operators and, in general, have supported the undertaking.

The project could not go ahead without financial aid from the city in the form of a write-down in the cost of acquiring the site and buildings. The acquisition cost to the city will be approximately \$225,000. The sale price to the American Friends is \$78,000. The write-down, however, is not quite as great as the difference between these two figures might indicate. The ice-cream plant, which is not being rehabilitated, will cost \$70,000, and the community center, which is really a community facility that the city should provide, will cost roughly \$25,000. With these removed from the acquisition cost, the write-down is from \$130,000 to \$78,000 or \$52,000—\$520 for each of the proposed 100 dwelling units. This is still a sizable amount, but it is the only means by which the project could go ahead. It is a subsidy, however, that is similar in principle to the write-down of land that is cleared of its structures and then sold to a private redeveloper. The sale price is its estimated fair use value.

The builder who is to undertake the rehabilitation of the structures estimates that the saving from using the existing walls instead of tearing down the buildings and putting up new ones is roughly 30 per cent. The costs of rehabilitation work will be from \$6,000 to \$6,500 per dwelling unit. With the \$780 per dwelling unit for land cost added plus a few other expenses, the cost per apartment will be around \$7,500, an amount that is considerably less than the price of similar apartments built at today's prices. By using the existing structures in this block, this enterprise is able to provide good living accommodations at costs considerably below the costs of new structures. This is an acid test for any rehabilitation project.

The American Friends' undertaking is of interest for other reasons as well. It is a co-operative venture. The occupants are permitted to make their equity payments in the form of work or cash or both. This is not the place to go into the details of this arrangement except to point out that the project is a valuable experiment from points of view other than that concerned primarily with the feasibility of the rehabilitation operation.

Nevertheless the project is an opportunity to test the feasibility of rehabilitation on one kind of building and to meet one kind of housing

need. It should be watched carefully and when completed, thoroughly analyzed from several angles. At this point, however, it appears to be financially sound and to be a means of providing good living accommodations to those in the middle- or lower-middle-income groups. The costs are too great for families living in public housing in Philadelphia, but they are at a level of great housing need at the present time. The whole East Poplar plan has great value also in that it demonstrates the use of several redevelopment tools in one area. By itself, in the midst of slums and blight, the Friends' project would face insuperable difficulties. As part of a balanced redevelopment scheme for the whole area, it holds a great deal of promise.

CHAPTER IV

SUMMARY

THE detail of the preceding chapters may obscure the basic propositions advanced in this monograph. A recapitulation of the basic redevelopment methods short of clearance may be in order.

Urban redevelopment is more than the clearance of blighted and slum areas and the preparation of them for better uses. It involves a comprehensive program to improve the living and working conditions in most areas of the city. It includes blight prevention as well as treatment or cure.

Basic to such a program is a general plan for the city. The general plan should include a comprehensive redevelopment plan. It, of course, should be related to all other elements of the general plan.

The comprehensive redevelopment plan should be based on two classifications of an urban area into subareas or districts. The first is the delineation of planning districts or neighborhoods; the second is by the principal types of redevelopment activity that are called for by existing conditions.

For each planning district or neighborhood, the plan should show the concrete objectives and projects of redevelopment. Redevelopment includes the provision of new or additional community facilities, e.g., streets, parks, schools, playgrounds. The plan should also indicate the proposed land uses for the area as well as any specific public or quasi-public programs required to assure these uses. A time schedule for the major sections or stages of the plan for each district is also necessary.

The area classifications by types of redevelopment activity will often be within the boundaries of planning districts but sometimes may overlap them. Also, reasonably complete redevelopment plans for each planning district may often be developed concurrently with or later than the classification of redevelopment treatment areas. There are five general classes of areas on the basis of kind of redevelopment treatment they should receive: (1) clearance areas, (2) districts for area rehabilitation, (3) enforcement areas, (4) predominantly open areas, and (5) open areas. Thus, in clearance areas the predominant redevelopment action is clearance and preparation of sites for new

buildings or other uses. Area rehabilitation calls for a public agency to acquire properties and rehabilitate the structures. Enforcement areas are those in which the structures and environment can be improved through properly administered police power measures. Predominantly open areas are those where city action in acquiring and replatting is required. Open areas require control through subdivision regulations or public acquisition to assure their proper development.

Enforcement of police power measures and area rehabilitation are the two aspects of balanced redevelopment that are usually overlooked by local planning and other officials. This study, therefore, emphasizes their operation and their place in comprehensive redevelopment programs.

Nearly every city has the police power tools necessary to carry out an enforcement program with the exception of a minimum housing code. The ineffective use of these tools can be laid largely to lack of co-ordination and vigor in applying them.

This study advocates that these enforcement measures be geared to a comprehensive redevelopment program by (1) centralizing and coordinating their administration so as to provide concentrated area enforcement and (2) applying them so that they become effective supplements to redevelopment operations other than enforcement.

Three kinds of enforcement activity are advocated in this study: (1) concentrated area enforcement—the intensive application of nearly all enforcement tools in one area at one time; (2) complaint or referral enforcement by the regular departments having jurisdiction over individual codes and ordinances; and (3) routine enforcement through the use of permits or similar devices. All have important roles in a comprehensive redevelopment program, but concentrated area enforcement is the most significant.

Concentrated area enforcement occurs primarily, although not exclusively, in the enforcement areas. These may be subdivided into three districts: (1) reconditioning districts, (2) conservation districts, and (3) growth districts. Reconditioning districts are those where a substantial number of structures are in some respects below the standards of the codes and ordinances. Conservation districts are those where most of the structures are above these minimum standards. Growth districts are those in the process of development at or above the code standards.

Concentrated area enforcement, of course, is most applicable in the reconditioning districts. Conservation areas come next in regard to need. Growth areas usually do not need concentrated area enforcement but do require checking on complaints and careful issuing of permits.

Concentrated area enforcement should also be applied in clearance

areas and rehabilitation areas. In both, however, the degree of enforcement will differ from that appropriate in reconditioning districts. In clearance areas, enforcement is primarily concerned with those conditions that endanger immediately the lives and health of the residents. This includes vacating and demolishing totally unfit buildings. In rehabilitation areas the same rule applies except that structures not to be rehabilitated should receive the full concentrated enforcement treatment.

Complaint or referral enforcement continues on a city-wide basis, but it is done in light of all other redevelopment activity so as not to work at cross-purposes. Permit enforcement applies to the building code, zoning ordinance, and subdivision regulations. Its chief application is in growth districts, predominantly open areas, and open areas. It is important as well, however, in all other districts, and its operations must also be tied in with all other steps in redevelopment.

Full enforcement of all police power measures in this manner will enable a city to improve many areas that are in the earlier stages of blight and to postpone the onset of the blighting process in other districts that otherwise might soon become definitely substandard.

Area rehabilitation, a new and somewhat experimental proposal, is designed to make use of capital facilities represented by sound, but obsolete, structures. It also offers a possibility for providing some quantity of acceptable middle- or lower-middle income housing.

Nearly all of the subject matter discussed in this part of URS has suffered in times past from too loose and sweeping generalizations. For example, we have been told that police power measures or regulations have failed or that their enforcement is all that is necessary to do away with the slums. In place of this kind of meaningless dogmatizing, we need careful study and imaginative testing of rehabilitation, reconditioning, and conservation measures both under police power measures and voluntary sponsorship. The objective should not be to displace other necessary ways and means to decent, livable cities but rather to find out, under the conditions of each urban locality, what these redevelopment activities short of clearance can reasonably be expected to accomplish and then to see that they play their parts in well-planned and well-administered local redevelopment programs.

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APPENDIX

APPENDIX

A NOTE ON TAX-DELINQUENT LAND

ONE of the chief themes in this and some other parts of URS' work has been the mistake of looking upon urban redevelopment as simply acquiring very bad buildings by a local public agency, tearing down the structures, writing-down the purchase price, and disposing of the land for private or public improvement. In addition to this necessary and desirable work, municipalities should use, in a combined operation, all of their powers affecting land use, housing and other types of building to assure continuous improvement in the physical, man-made setting in which their citizens live and work. The use of several of these other powers have been discussed in the body of this section. At least one other, however, deserves a brief statement here. It is the disposal of land and buildings taken over by a municipality for failure to pay property taxes. Although at first glance this may seem to be very peripheral to redevelopment, it is germane to the discussion here and, in some local circumstances, might be a significant part of a wise and inclusive redevelopment policy.

When cities have the authority to acquire tax delinquent property and sell it in order to clear up the back taxes, the controlling policy objective practically always has been to get it back on the tax rolls as rapidly as possible so that it can produce municipal revenue. This is, of course, a laudable objective, but it should not be the only nor an over-riding one.

Present legal directions and limitations aside for the moment, three *other* objectives might well be considered in deciding what should be done with such property in the public interest. Certainly the proper official or officials should weigh these objectives carefully, particularly if a municipality has started upon a comprehensive redevelopment plan, which includes, by definition, an enforcement program.

The first and an obvious consideration is whether the city will have any use for the property in the reasonably near future. The housing authority, the redevelopment agency, the highway department, or any other department that has cause to purchase land might well be planning to acquire an area in which the tax delinquent parcel is located. If a property is sold, the city then will have to rebuy it and usually at a much higher price.

It certainly would not be unreasonable to require that each department of the city, particularly the planning department, be informed prior to the offering for sale of any tax-delinquent parcel. If a department can show good cause for not selling the property, then it should be held for a specified length of time for use by that department. The loss to the city in not getting the property back on the tax rolls would be made up many times over by the savings in not having to acquire it later on.

For example, most cities have a great need for small neighborhood parks, particularly in their relatively close-in residential areas. Many of these districts were built up in a period when public open spaces, particularly small neighborhood parks

and playgrounds, were not looked upon as important elements in a livable urban environment. The major reason cities have been so slow in making up their deficiencies in these facilities is high acquisition costs. Land and building prices in developed areas, even for old and obsolete buildings, are so high that city administrators hesitate to allocate the money required. Even a few delinquent parcels in such areas could reduce these acquisition costs, even if the parcels were held for several years before the remainder of the open space is acquired. Then again, a parcel may be in a probable or proposed redevelopment or public housing site. Sale to these agencies would save them effort and money. This type of operation just makes good common sense.

The second objective a city should consider before disposing of tax-delinquent land is closely related to the first. Perhaps the tax-delinquent property is not located in an area to be acquired and, on that basis alone, it would seem reasonable to sell it. But it could have some trading value and might be used to ease the acquisition problem in other areas to be acquired. One reason for resistance to acquisition is that many families (and small business establishments) being displaced know of no place to go. As has been pointed out, aiding them in finding places to live is a major problem of redevelopment. If the city were to keep tax-delinquent properties that offered relocation possibilities and trade them for others in areas to be acquired, the acquisition process could be eased. The extent of this effect would depend, of course, upon the number of parcels the city would be able to use for such purposes, their relative desirability, and other facts that would vary widely from time to time and from city to city.

Under this type of operation, then, the property would not have to be located in an area to be acquired in order to keep it off the "for sale" list. All that would be necessary would be that it meet certain basic requirements or standards set by the city for its use as relocation housing. If the city were able to build up a sizable number of these properties, then it could enter into an acquisition program with some assurance that at least a good-sized dent could be made in the relocation problem.

The third objective that should be considered has been recognized already in Baltimore. This objective is an examination of the improvement on the property to be sure that it meets the minimum code standards before it is sold. It is difficult, not to say ridiculous, for a city official to tell the owner his structure must be vacated or demolished when he has just purchased it from the city. Each piece of property that is to be sold by the city should be inspected prior to its sale. If the structure should be demolished, the city should have it torn down before the land is sold or make its demolition a condition of sale. If it is simply below the city's minimum standards in items that can readily be corrected, the city should either make the necessary changes or additions itself or incorporate in the sale a requirement that the owner make certain specified improvements. The city should not allow any property to leave its hands unless it is in compliance with the city's standards or unless it is agreed in the sale that the new owner will comply.

Consideration of these objectives jointly by the department that handles disposition of tax-delinquent land and those that plan over-all land use and purchase substantial sites for their own purposes, would not be too difficult. Certainly it would be no more formidable a task, given competent land-use planning, than many other functions local public servants perform day in and day out. But like so many simple co-ordinating operations, it just does not get done. No one agency or department and no civic or citizen group takes the initiative to work out the necessary policy

understanding and administrative arrangement. Consequently, old, inadequate, piecemeal and costly procedures continue unchanged.

Time and resources have not allowed an adequate exploration of this subject. Quite clearly, however, putting into effect the arrangement suggested in these general terms would require attention to several questions. Statutes and court decisions on tax collection procedure would have to be reviewed. Probably some of the statutes would have to be amended. Again, the administrative procedure would have to be skilfully set up so that none of the basic considerations would be neglected or pushed aside, and that a decision on each parcel or group of properties could be reached fairly promptly and without unnecessary bickering. In most cities, the planning unit would have to strengthen its work on land use and on the priority of public projects and undertakings.

Finally, it should be emphasized that this proposal is a separate subject from the desirable protection of property owners from loss of their holdings for temporary arrearages in taxes. Whether the provisions now in effect for this purpose in any particular city are adequate or unnecessarily generous or too favorable to professional speculators in tax delinquent properties may well be an important question but, at all events, it is a distinguishable issue from the question of the desirability of the policy proposal made here.

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PART V

RELOCATION OF FAMILIES DISPLACED IN URBAN
REDEVELOPMENT: EXPERIENCE IN CHICAGO

BY
JACK MELTZER
with the assistance of
SHEILAH ORLOFF

EDITOR'S FOREWORD

THE subject of this section of URS is an excellent example of how very different one important sector of redevelopment may look to various persons all of whom know the bare facts of a local program and are directly interested in the results.

To some, relocation of families from clearance sites is a minor or even an annoying chore that has to be done before new building can start; to others it is a delicate and crucial responsibility that agencies acting in the public interest must undertake to minimize hardship, inconvenience, and sometimes near tragedy for human beings who often have little padding between themselves and the roughness of the outside world. To still others it is a compelling reason for widening the scope and methods of redevelopment; some see it as a good device for slowing down local programs about which they have doubts. Some believe the difficulties of the process are due to human inertia, ignorance and obstinateness of the families to be displaced; others attribute the troubles to shortsighted and inadequate planning plus a natural, proper, and, on the whole, admirable dislike of being pushed around for obscure reasons or ends.

Finally, some believe and have said that a mountain is being made out of a molehill, whereas, their colleagues urge that if more thought and intelligent action are not forthcoming, redevelopment in most urban centers may well end up as one or two or a handful of scattered projects—interesting playthings to a few officials, a source of pride to a few architects and builders, a small additional talking point for civic boosters—but nothing more.

Mr. Meltzer, in addition to telling the story of the Chicago experience with relocation to date, makes quite clear where he stands on policy and planning questions of this kind. I point out some of them here simply to suggest that he is worth reading by many local officials and others who might conclude from the title of this section that it is a specialized, management subject in which they have little interest.

Mr. Meltzer knows whereof he speaks. He has served housing, planning, and redevelopment in Washington, regional and local agencies. When this section was written he was a staff member of the Office of

the Housing and Redevelopment Coordinator in Chicago. He is now a field representative for the Division of Slum Clearance and Urban Redevelopment of the Housing and Home Finance Agency. Miss Orloff, who helped materially in assembling and analyzing materials and in verifying facts, is also on the Coordinator's staff. She, in turn, had the benefit of earlier investigations by Frank Cliffe and Walter B. Schilling. Mr. Meltzer wrote most of his discussion in the summer and fall of 1951.

URS owes much in this part of its work to D. E. Mackelmann, Acting Housing and Redevelopment Coordinator in Chicago. Not only has he worked long, patiently and vigorously on relocation policy and practice in Chicago, but he has had a substantial influence on thought and action elsewhere, including Washington. He suggested that the Study might make use of the unusually long and varied Chicago experience. He helped in organizing materials and criticizing drafts. Without his advice and understanding, URS would have had relatively little on this vital subject.

C. W.

CHAPTER I

INTRODUCTION

ALTHOUGH this report is based primarily on Chicago experience, Chicago, of course, is only one of many cities confronted with the task of rebuilding major portions of its outworn areas, and of stimulating growth in accordance with the over-all needs of the community. The same elements and related circumstances do not obtain in all of these cities. Nevertheless, the Chicago experience with relocation arising out of the city's many-faceted redevelopment program seems an appropriate illustration, both of the problem itself and of approaches to its solution. Also, Illinois redevelopment legislation preceded the passage of the federal Housing Act of 1949, and consequently Chicago organized for redevelopment rather earlier than most of the nation's other large cities.

Beginning with relocation in the depression of the 1930's under the first program of slum clearance sponsored by the Public Works Administration, the pages that follow trace the city's experience (for both public and private redevelopment projects) through the program under the Housing Act of 1937, the World War II years, the transition period immediately following the war, and finally, through the period from 1948 to the present, which have been years of a relocation task of unprecedented magnitude.

The administrative organization for Chicago's relocation activities and the actual process of relocating site occupants are described. The policies of the federal agencies are noted and, in conclusion, a number of possible methods for carrying through relocation activities are discussed.

Thoroughout the literature on planning, housing, and redevelopment, the process of readying a site for development has variously been described as site clearance, dislocation, displacement, or relocation. For purposes of clarity and understanding, some discussion of the distinctions in usage is warranted. Site clearance is the act of removing all physical obstacles in readying a site for new development. (Displacement is the fact of removal of a family from a structure, so that demolition may proceed. Relocation is a process—a process whereby, ideally, families are given an opportunity to move from sites in accord-

ance with well defined development schedules, in a manner that causes them a minimum of inconvenience, provides them with the maximum opportunity for better living, and creates a minimum of social dislocation. The process by its very nature requires full cognizance of the effects of site clearance on the site residents and the community. Relocation, therefore, may be a hindrance to site clearance, an essential step preceding site clearance or a corollary undertaking with site clearance.)

These distinctions are of primary importance, for this discussion is directed toward more than an outline of objectives and aims; it looks to an explanation and understanding of tasks and workable programs. Although site clearance and displacement are synonymous with new development in built-up areas and, therefore, date back to the earliest public projects, relocation as just defined is a relatively recent development. Nowhere yet has its full impact been felt, and more importantly, nowhere yet has a community marshalled all of its forces to do the complete job required for adequate rehousing of displaced families either in the formulation of a sound relocation program or in its implementation.

Clarity requires one additional distinction in usage, i.e., rehousing. Rehousing as conceived here is the logical extension of the public and social responsibility and is implicit in the concept of relocation. It is essential, however, to distinguish between the extension of this responsibility and the assumption by the relocater of the specific operations necessary to achieve the end. Thus, although the relocation process is characterized by an inherent responsibility for relating development and demolition schedules, the decisions and circumstances that affect this responsibility may not be entirely within the operational sphere of the relocater. Analogous relationships exist between the responsibility for rehousing and the relocation process of which it is a logical part.

CHAPTER II

THE EVOLUTION OF THE PROBLEM

PRIOR to the 1930's planners were primarily concerned with projects of a monumental character—great parks, broad highways, magnificent structures, typified in Chicago by the lake front development, as well as lesser projects involving street widenings, subdivision developments, and the like. Few, if any, of these measures required the large-scale movement of families. Coping with slum conditions involved the alleviation of unhealthy and unsafe conditions in existing slum dwellings and the prevention of such conditions in new buildings, principally through the enactment of zoning and tenement laws.

THE EARLY 1930's

During the early 1930's at the outset of the depression, primary concern was with alleviation of widespread unemployment, and consequently, development and redevelopment were undertaken essentially for the purpose of creating jobs. The emphasis was on public works construction. By 1934, as a further means of providing work, the Public Works Administration undertook a program of direct slum clearance and housing construction.

During this period the Housing Division of the Public Works Administration proposed the construction of new apartment and row-house buildings in Chicago on a site (which later became the approximate site for a public housing project known as Ida B. Wells Homes) that necessitated the removal of some 2,000 families. This marked the emergence of the concept of public responsibility in Chicago for relocating site residents, even though in a rather different form than we recognize it today.

The Chicago Metropolitan Housing Council in an unpublished office memorandum dated November 9, 1934, outlined a procedure for the rehousing of these families residing in the area to be acquired for the PWA housing project. The Housing Council estimated that 40 per cent of the families were on relief. The responsibility for moving these relief clients to other locations would be assumed by the Illinois Emergency

Relief Commission, including the responsibility for assisting those non-relief families that were unable to defray the cost of moving. Further, the Relief Commission would be requested to find "suitable" dwellings for the relief and nonrelief families who looked to them for assistance in moving. Since most of these families were Negroes, the memorandum suggested that an investigation by the relief commission into the availability of housing for Negro families might indicate that "fundamental modifications should be made in the basic plans of all groups concerned with the removal and rehousing of these families and those responsible for the construction of new dwellings."

In 1935 the Metropolitan Housing Council published an expanded report on *Finding New Homes for Families Who Will Leave Public Works Administration Construction Areas in Chicago*. At that time it was estimated that the combined slum sites of all proposed PWA housing projects in Chicago contained some 22,000 people, most of whom had low incomes or were on relief. The introduction to the report stated: "The Public Works Administration Housing Division in Chicago early recognized the fact that the success of their projects depended on an orderly program for rehousing the families on their sites. They realized that it would be very much to their disadvantage if they were to construct new neighborhoods at the cost of having damaged other neighborhoods, or having forced a large group of people into inferior living quarters."

The Illinois Emergency Relief Commission accepted the responsibility for financing and staffing the relocation work. A major responsibility for the direction of the operation was assumed by the Metropolitan Housing Council in order that the Council, which included representatives of real estate, social, and neighborhood organizations, might utilize the resources of these groups in the solution of the problem. In addition, the Council had some prior experience with the problem since it had been actively engaged in a program of relocating occupants of substandard and hazardous buildings scheduled for demolition. A Joint Rehousing Committee composed of members of public and private relief organizations, the Public Works Administration and the Metropolitan Housing Council was formed.

The Metropolitan Housing Council, as one of the active participants, set up its own Rehousing Committee made up of representatives of the Chicago Real Estate Board, the Council of Social Agencies, and improvement associations. A Housing Service Bureau was established to secure listings of vacant apartments in the city. It appeared at the writing of the report that this bureau was able to develop a satisfactory program for rehousing the white families. It was soon apparent, however, that not more than 20 per cent of the necessary dwelling units for

Negro families was available. In all parts of the city, property owners were fearful of Negro dispersion. "There was aggressive agitation to drive the Negroes back to the south side."¹

In the light of this situation the Council's Rehousing Committee recommended to the PWA Housing Division that certain changes be made in its contemplated program on the South Side. The Council also called for the expediting of Negro subsistence homesteads and the initiation of rehabilitation programs, particularly for buildings with vacancies rejected because of structural conditions.

Although the Public Works Administration's housing program was halted at about this time, due primarily to a shortage of funds and to an adverse court decision, the emergence of these basic relocation principles and problems is noteworthy.

THE PASSAGE OF THE HOUSING ACT OF 1937

The United States Housing Act of 1937 provided for the clearance of slums and the construction of public housing for families of low income who were unable to secure adequate private housing at a rent within their income. In order to put this Act into effect, relocation was given formal national recognition for the first time.

In 1938 the United States Housing Authority, the agency responsible for the administration of the Act, issued a bulletin on policy and procedures for the relocation of site occupants.² The bulletin was designed as a guide for local authorities undertaking the construction of public housing projects and outlined the public responsibility for relocation activities:

No aspect of the United States Housing Authority aided program requires more careful treatment than the relocation of site occupants. Local authorities are urged . . . to exert every effort to relocate site occupants in decent, safe and sanitary dwellings well within their financial reach. The suggested procedures should insure fair and courteous treatment of site occupants and should, incidentally, supply another means of acquainting the public with the objectives of the United States Housing Authority aided program.

In addition, the "acute housing shortage" that existed in some cities was mentioned, and the added difficulties involved in rehousing members of minority groups. The reference to "housing shortages" during a period when vacancy rates were considerably higher than they have been in the postwar period was particularly significant in terms of the

1. *Finding New Homes for Families Who Will Leave Public Works Administration Areas in Chicago* (Chicago Metropolitan Housing Council, 1935).

2. *Relocation of Site Occupants*, United States Housing Authority Bulletin No. 10, June 30, 1938, Rev. April 3, 1941.

lack of units available at rents or prices within the reach of families in the lower-income group. The 8 per cent over-all vacancy rate for the city of Chicago in 1934 had dropped to 4.3 per cent by 1939.³ In the low-income areas of the city, however, particularly in those surrounding the central business district, vacancy rates were as high as 15 per cent.⁴ Prior to 1935 and the passage of the state law providing for rental allowances to relief clients, vacancies in these areas were even higher. Money in the hands of relief recipients was scarce and landlords did not relish the prospect of having such families as tenants principally because of vacillating policies in regard to rent payments. Underlying this whole approach to relocation was the necessity for minimizing objections and delays to the new and little understood public housing program.

The USHA guide made clear, however, that the final responsibility for relocation rested with the individual family and urged the local authority to adopt the policy of "requiring each family to exert initiative in finding a home." Among the procedures suggested in the USHA bulletin were:

1. The creation of an advisory committee to be made up of representatives of various social agencies, departments of municipal government and church, school and civic groups in the community. It was felt that this action would serve to assure the co-operation of the various agencies and community groups and would also furnish a device for interpreting the housing program to the community at large. It was suggested that the services of such a committee be utilized not only for advising on relocation activities, but also in the formulation of tenant selection policies and procedures for the new housing developments.

2. A public relations program involving periodic progress reports through press releases and talks to groups that might be antagonistic to the program.

3. A time schedule of relocation activities that called for demolition to proceed subsequent to, or concurrently with, relocation in order to avoid needless vacancies in existing structures prior to clearance. The bulletin emphasized the close relationship between relocation and land acquisition.

4. Establishing a file of vacant dwellings by means of house-to-house canvass, contacts with local real estate or rental agencies, co-operation of post office mail carriers and family welfare agencies, public appeals, and contact with owners of vacant dwellings. The bulletin states, "When site occupants call to obtain information concerning vacancies,

3. *Chicago Land Use Survey* (Works Projects Administration, 1942), I, 259.

4. *Ibid.*, p. 188.

if possible, they should be given two or three listings, preferably comparable to or better than their present dwellings, having the same or a lower rent unless the family is financially able to assume a higher rent to obtain better quarters."

5. Planning financial assistance. It was recognized that one of the major problems in relocation was the difficulty in obtaining funds for moving expenses and the advance payment of the first month's rent. Since a number of site occupants at that time were on relief, attention was directed toward the co-operation of welfare and relief agencies in relocating their clients. "Financial assistance, however, should never be planned unless it has been clearly demonstrated that the family is unable to move without such assistance."⁵ The United States Housing Authority would approve funds for assistance only if every possibility of obtaining it from local welfare, relief or social agencies had been exhausted and the costs of legal eviction would be greater than the amount for such assistance.

Following the general outline of the United States Housing Authority relocation guide, the Chicago Housing Authority's Cabrini project site was cleared of about 600 occupants. The process was related directly to the absorptive capacity of the local private housing supply available to and within the financial means of the site families.

Outside of the USHA aided program there is little, if any, documentary evidence that much consideration was given to the formulation of policies and procedures for relocation during the late 1930's and the period prior to World War II. The idea of public responsibility, however, was widely recognized. Not much progress, however, was made with methods and techniques.

THE WORLD WAR II EXPERIENCE

During most of the World War II period, development was largely limited to building houses for war workers and erecting industrial plants to fill wartime needs. These projects, for the most part, were built on vacant or nearly vacant land and the problem of relocation was a relatively minor one.

In 1942 the site of the Chicago Housing Authority's federally-aided Robert Brooks Homes was cleared of approximately 800 families. Relocation procedures utilized on this site were similar to those for the Ida B. Wells and Cabrini projects. Clearance moved forward despite protests against demolishing dwelling units during a war period and at a time of substantial influx of defense workers.

5. *Ibid.*, p. 5.

PRIVATE ASSUMPTION OF RESPONSIBILITY

The experience in New York during this period is sufficiently significant to warrant a detour from the Chicago story. Just prior to the end of World War II, in the latter part of 1944, the Metropolitan Life Insurance Company began plans to put up Stuyvesant Town, a large housing development on New York City's lower East Side. The project was made possible by the New York State Redevelopment Companies Law of 1943, which had as its purpose the replacing of blighted areas with new housing developments through the co-operation of the city and private investors. At the beginning of 1945 the site of Stuyvesant Town held approximately 3,000 families. The new project was to accommodate 8,800 families. Resistance to relocation was great. Site tenants organized to voice their protests and many other groups—housing, political and civic—in the city felt that the project should be postponed until some time after the war.

Because of the bitter opposition, Metropolitan Life Insurance Company at a cost of some \$200,000 assumed the responsibility of helping site tenants to find new homes. The law did not require this action. Probably this was the first time that a large-scale private housing developer assumed the relocation responsibility. To perform the task, Metropolitan Life Insurance Company contracted for the services of one of the private real estate management firms it had utilized in land acquisition. Members of two other realty firms served as consultants. In January 1945, a Tenants Relocation Bureau was established on the site. A full account of the Bureau's operations and observations in the nine months that it took to clear most of the 3,000 families from the site is contained in a report of that experience.⁶ The account outlines the methods used by the Bureau, including the listing of vacancies, the personal contacts with the tenants, the co-operative arrangements with social agencies, the use of legal action (there were no evictions) and financial payments to tenants. The report discusses the methods for coping with resistance to relocation and emphasizes the necessity for co-ordinating management, land acquisition, relocation, and legal activities.

In conclusion, the report states, “. . . some difficulty will always be encountered in clearing a site for redevelopment. . . . By forcing people from one slum area into another . . . the basic ills of most urban low rent housing will merely be shifted to a different location. . . . If urban redevelopment is going to benefit the entire city, the needs of

6. Rosamond G. Roberts, *3,000 Families Move to Make Way for Stuyvesant Town, a Story of Tenant Relocation Bureau* (New York: James Felt & Co., Inc., February, 1946).

families living on slum sites must be given consideration through long-range planning."

THE TASK TAKES SHAPE 1945-1947

In the transition period immediately after World War II (between the years 1945 and 1947) redevelopment plans of all kinds began to take shape in unprecedented volume in Chicago. In addition to the plans that had been temporarily laid aside during the war, there were new proposals for building housing to relieve the shortage that had become critical by 1945 with the return of war veterans and the creation of large numbers of new families. There were also plans for the expansion of hospital, university and other institutional facilities and plans for schools, parks, highways, and other public improvements. It soon became evident as statements on plans for redevelopment began to appear that relocation would demand first consideration. At the outset, however, while the individual public and private agencies were beginning to recognize their own relocation problem, little cognizance was taken of other plans being formulated concurrently in the locality. Equally important, no attention was given to the combined effect of the compounded relocation problem of all redevelopment projects on the absorptive power and growth capacity of the city.

In the early part of 1947 a report published by six private and public organizations concerned with rebuilding a slum area on the central South Side of Chicago, stated:

Slum clearance everywhere must contend with the shortage of housing facilities which prevents families from moving about freely. Areas to be cleared are frequently deadlocked by the inability of families living on the sites to move away. A preliminary step in the land clearance program . . . is therefore the provision of relocation housing. . . . An Illinois appropriation is needed sufficient to provide at least 1,000 dwellings to be used solely for the relocation of families from South Side clearance projects.⁷

The figure of 1,000 was the estimate of the number of units needed to open enough sites to start redevelopment. A supplement to this report⁸ estimated the number of families to be moved from a three-square-mile redevelopment area (22nd Street-Pennsylvania Railroad-39th Street-Lake Michigan) at approximately 26,000 (of which 5,000

7. *An Opportunity for Private and Public Investments in Rebuilding Chicago* (Published by Six Private and Public Organizations Concerned with the Rebuilding of a Slum Area, Chicago, 1947).

8. *An Opportunity for Private and Public Investments in Rebuilding Chicago: A Supplementary Report* (Chicago, Summer, 1947).

were single persons). As to the possible types of rehousing available or to be available for these families under minimum conditions, it was estimated that 4,500 could be accommodated in public housing, 2,800 in private housing and 18,700 were not provided for. Under optimum conditions the estimate included 11,000 families not provided for. The private housing estimates referred to the probable number of newly constructed dwelling units that could be built for families able to afford the rents or prices at which private housing could be made available.

STATE LEGISLATION

In 1947, the City of Chicago and the State of Illinois gave formal and tangible recognition to the magnitude of the task of relocation preparatory to slum clearance. On July 2, 1947, the Illinois General Assembly enacted a measure that provided that the State would match city funds to facilitate and aid in rehousing low-income families residing in areas to be redeveloped under the Blighted Areas Redevelopment Act of 1947. This was to be accomplished by the construction of projects by housing authorities pursuant to the Housing Authorities Act of 1934 as amended. The state act made available \$3 $\frac{1}{3}$ million to Chicago for relocation housing in addition to \$10 million for slum clearance activities. The City of Chicago, in turn, passed a slum clearance bond issue of \$15 million, a portion of which was to match the state funds as available and a housing bond issue of \$15 million to construct relocation housing.

The public discussions in connection with the bond issues brought into sharp focus the relocation phase of the entire redevelopment program. In a publication issued by the City of Chicago entitled *Slum Clearance Is Your Business*, the thread of public responsibility for relocation is woven throughout, and a particular section, titled "Rehousing," states clearly the extent of this responsibility:

Now, when these slum areas are cleared and the buildings torn down, the families who are now living there must have a place to live. We can't just tear down their homes and turn them out. Dwellings must be provided for them.

It is obvious that unless those families who will be dispossessed by redevelopment projects or other civic improvements, such as superhighways, parks, etc., are relocated in decent dwellings, it will not be possible to even make a start on tearing down the slums.

PUBLIC AND PRIVATE CO-OPERATION

An agreement entered into in the early part of 1947 between the Chicago Housing Authority and the Michael Reese Hospital deserves

notice. The Hospital had formulated plans for a sizable expansion of its facilities on the central South Side of Chicago, an area in which the Chicago Housing Authority as well as the Illinois Institute of Technology had proposed redevelopment and in which the Land Clearance Commission was later to locate a large project. Under the terms of the agreement, the Chicago Housing Authority was to acquire and clear the land. The Michael Reese Hospital agreed that when the Housing Authority had acquired the site it would submit a bid to repurchase at a price equal to the total acquisition cost. In referring to the relocation of site tenants, the contract provides that:

The Authority and the Hospital agree that no tenant residing in the said area will be evicted or dispossessed (except for a breach of a substantial obligation of the tenant) within a five-year period following the date of this agreement, unless the housing shortage is so alleviated that it is possible for the tenants . . . to secure dwelling accommodations elsewhere within their financial reach. Subject to the aforesaid provision regarding eviction or dispossession no more than 17 residential structures may be demolished during the calendar year 1947 and no more than 22 residential structures during the calendar year 1948.

In all, there were some 500 families living on the Michael Reese Hospital site at the time the agreement was made and by the end of 1948 only a few families had been removed from the site.

CHICAGO HOUSING AUTHORITY'S DEARBORN HOMES

In the early part of 1948 the Chicago Housing Authority was ready to proceed with plans for erecting Dearborn Homes—a war-deferred, low-rent housing project. In 1945 the site contained about 500 families, plus single persons, living in about 400 dwelling units. In 1948 the Authority was faced with the problem of removing 190 remaining site families, all of whom were Negroes. This proposed project was situated on the central South Side of Chicago, in an area of heavily concentrated Negro population. In February 1948 tenant resistance to moving from the site was intense. The Chicago Housing Authority employed a consultant to prepare and carry out a relocation program, and by July 1948 all of the families had been relocated. The operations and the techniques used by the Authority are described in a report issued soon after the site was cleared.⁹ A summary follows.

A Steering Committee on Relocation was appointed. It consisted of representatives of agencies both in the area and in the city-at-large, and was charged to "help find relocation resources, interpret relocation

9. *Memorandum on Relocation: Chicago Housing Authority Experience* (Chicago Housing Authority, 1948).

problems to the staff and explain relocation plans to the people on the site, to the general community and to the press."

In the minutes of its meeting of February 25, 1948, the Steering Committee stated: "It is recognized that relocating residents of (this) site is only one part of a large, graver problem of rehousing thousands of Chicagoans who will have to be displaced by slum clearance and other improvement programs."

In drawing conclusions from the Dearborn Homes relocation experience the *Memorandum on Relocation* had this to say:

Removal of families from a site through the force of legal action is no longer practical; relocation must include work with the families on the realistic basis on which they live, and positive action in terms of vacancies to provide them with dwellings.

The relocation problem in Chicago, and in many other cities, is large and imminent. Its solution is difficult and far from painless at best. It is, among other things, an educational process for or against city planning and urban redevelopment.

The experience with the "Illinois 2-9" (Dearborn Homes) site has demonstrated that Chicago, with its contemplated large-scale redevelopment program, requires a well-staffed permanent relocation service to accomplish the following:

- (1) *Establish city-wide policies for relocation.*
- (2) *Survey the requirements of families on sites to be cleared.*
- (3) *Organize a city-wide "steering" committee and neighborhood advisory committees.*
- (4) *Set up and maintain a time schedule among public, quasi-public, and private organizations planning to clear sites for residential, commercial, or industrial rebuilding, and relate this schedule directly to the relocation services and vacancies available and to the relative importance of the new construction.*
- (5) *Make contacts with real estate organizations and individual owners to mobilize vacancies as they occur and make them available to "relocatees."*
- (6) *Work out permanent relationships with the courts, with social agencies, neighborhood councils, churches, the press, and other redevelopment agencies.*
- (7) *Set up site offices and train and provide staff to man them.*
- (8) *Provide actual relocation service to agencies preparing to rebuild, probably on a fee basis and according to the established schedule.*

[Emphasis added]

Such systemization seems essential, quite aside from its humanitarian values, to minimize expensive overlapping and duplication which are otherwise inevitable, and to eliminate delays which are otherwise likely. It seems essential if residents of the sites are to be considered part of the general rehousing program rather than sacrifices to it. It seems essential if the thousands of "relocatees" and their relatives, friends, and neighbors are not to become bitter opponents of planning and redevelopment but will, instead, become active supporters of the rebuilding of their city.

Generally, the methods used in relocation on the Dearborn Homes site followed the United States Housing Authority guide of 1941. Although the co-operation of welfare and relief agencies was sought, it was not as important a factor in 1948 as in 1941. As an added tool for facilitating relocation, the Authority adopted an emergency policy of

accepting off-site families into its existing projects when this created a suitable off-site vacancy for a site family ineligible for public housing. The off-site families and the site families were admitted into its existing projects at continued occupancy income limits (approximately 25 per cent higher than the limits for admission). Although this measure enabled a total of 84 site families and 40 off-site families (124 in all) to move into existing Authority projects, the policy had to be abandoned as contrary to existing legislation. Another emergency measure to expedite relocation was the assumption by the relocation office of the responsibility for determining eligibility and selecting tenants for all Housing Authority projects. This centralized tenant selection procedure was contrary to the then established Authority policy of providing maximum project autonomy in tenant selection.

In recognizing the problem of relocating site tenants who were ineligible for public housing and unable to secure standard housing in the private market in Chicago, the Authority's report further states: "If the city's rehousing program fully recognized the needs of all income groups . . . relocation would be for each family a single move from a unit to be demolished to a unit suitable at least until change of economic situation, job location or family composition make a further move desirable."

WEST SIDE PROJECTS COMPOUND PROBLEM

On the near West Side of Chicago several redevelopment plans were also taking shape during 1948 and, as a consequence, the relocation task loomed even larger.

The Chicago Medical Center Commission, an *ad hoc* body created by the State in 1941 for the purpose of developing medical research and hospital facilities that eventually will occupy approximately 300 acres of the area, began land acquisition for its first project, a tuberculosis sanitarium. Almost simultaneously the Veterans Administration was acquiring land for a hospital in the same area. The City Subway and Superhighway Department was moving forward with plans for developing the first stages of the west route of the proposed superhighway system.

The over-all plans of the Medical Center Commission and the Superhighway Department would eventually necessitate the removal of over 4,000 families, many of them in the lower income levels. The sites for the first three stages of the West Side development program contained over 1,000 families, in addition to numerous commercial and industrial establishments, all of which would have to move.

Although the Department had proceeded with specific construction

plans and had established target dates for construction of the super-highway, it was unwilling to assume responsibility for relocating site tenants. Nor were the Medical Center nor the Veterans Administration prepared to assist in the relocation of the occupants on their sites. Neither agency had funds earmarked for such use.

After discussion with the Superhighway Department, the Housing and Redevelopment Coordinator for Chicago agreed to direct their relocation operation as a means of facilitating this phase of the city's housing and redevelopment program. Although the Office of the Housing and Redevelopment Coordinator is a nonoperating agency, responsible directly to the Mayor and charged with co-ordinating the city's housing and redevelopment program, the circumstances demanded immediate action. The existing operating agencies, Chicago Housing Authority and Land Clearance Commission, were not equipped to assume the added relocation responsibilities, and feared a diversion from their basic objectives as they saw them. Under the terms of the agreement, relocation costs incurred by the Housing Coordinator were to be reimbursed to the City's Slum Clearance Bond Fund by the Department. Subsequently, as highway construction proceeded westward, a similar arrangement was made between the Housing Coordinator and the Cook County Highway Department for that section of the highway to be built on county-owned property.

By the end of 1948 the Veterans Administration announced plans to break ground for its hospital before the first of the year. Although over 400 families were living on the site, relocation was not recognized as a serious problem by Veteran Administration officials at that time. Repeated discussions between the Housing Coordinator and the local and Washington representatives of the Veterans Administration finally culminated in the Housing Coordinator's assumption of this relocation responsibility. Active resistance by many site residents and a substantial amount of time spent in court helped to convince the VA officials that a problem did, in fact, exist. Similarly, at the request of the Medical Center Commission, the Office of the Housing Coordinator conducted a survey of the site of the sanitarium and subsequently undertook to assist in the relocation of families.

A small relocation field office was established on the near West Side in the summer of 1948. As the job of removing tenants from the super-highway, Medical Center Commission, and Veterans Administration sites grew, this office was expanded.

RELOCATION HOUSING

Sites for the public relocation housing provided for in 1947 were finally approved by the Chicago City Council in 1948 after much contro-

versy over site selection. Eight sites to contain approximately 1,350 units were selected, four of which were occupied by some 400 families plus a number of nonresidential tenants. Only two of the four sites were substantially occupied, one with approximately 280 families and the other with 80 families. The remaining two sites contained less than 30 families each. The Chicago Housing Authority plans called for the construction of units on the vacant sites first. Clearance of the first occupied site containing 27 families was begun in the summer of 1949. Relocation on the second site began in January of 1950, and on the remaining two in the latter half of 1950. Families were aided where possible by a small staff assigned to the relocation operation. The sites were cleared without an eviction.

NYLIC PROJECT

The federal Housing Act of 1949 made it possible for localities to secure federal aid for slum clearance and public low-rent housing. Soon after its passage, the Chicago Land Clearance Commission, already authorized under the Illinois Blighted Areas Redevelopment Act of 1947 to buy and clear blighted land for resale to developers, began plans for Chicago's first large-scale slum clearance project to be built by private enterprise. A contract was signed in 1949 with the New York Life Insurance Company providing for the redevelopment by the insurance company of an 100-acre tract on the city's central South Side, related to the projects of Michael Reese Hospital, Illinois Institute of Technology and Chicago Housing Authority's Dearborn Homes, Ida B. Wells and Prairie Courts. The preliminary negotiations with the New York Life Insurance Company had been begun prior to the passage of the federal act. Approximately 3,500 Negro families were living on the New York Life site. The redevelopment plan provided for approximately 2,000 new dwelling units within the project area.

Original proposals for this project met with a great deal of local opposition. A number of objections were based on the relatively large number of substantial structures existing on the site. In addition, the area included a number of articulate owner-residents who had lived there for a considerable length of time and who did not wish to relinquish their property.

One of the major elements of opposition centered around the question of segregation in publicly-aided private projects. In the spring of 1949, an ordinance was introduced in the Chicago City Council prohibiting segregation in such projects. Debate on the proposal was heated, and engendered a considerable amount of ill will, particularly in the Negro community. There were many arguments as to whether private redevelopers would, in reality, participate in redevelopment with the

imposition of nonsegregation requirements. The ordinance was opposed by the Mayor and rejected by the City Council.

Shortly thereafter, the City Council approved the New York Life Insurance Company project. As the Chicago Land Clearance Commission completed negotiations with the New York Life Insurance Company, the latter announced that first priority in the new project would go to former site residents. This announcement dissipated a certain amount of opposition to the project in the community, although the incomes of the majority of site occupants were too low for them to afford units in the new project.

RELOCATION BEGINS

Against this background, the Chicago Land Clearance Commission began relocation operations late in 1949. In order to determine the wisest way of undertaking the job, various methods were investigated, including the use of a private realty firm. In this connection, the private firm that had directed the relocation operation for Stuyvesant Town in New York was consulted. It was decided, however, that the Land Clearance Commission, itself, should take on the relocation task.

A director of relocation (formerly associated with the Chicago Housing Authority, the Housing Coordinator and the Federal Public Housing Authority) was appointed. A relocation office was opened on the site. Site property was initially managed by a number of private real estate firms, and later by one firm which shared management responsibility with the Chicago Land Clearance Commission's Director of Relocation and Management. For the most part, the relocation procedures utilized here have been similar and based on those referred to previously and drew, also, in part, on the experience with Stuyvesant Town.

PRIORITY SYSTEM ESTABLISHED

Immediately before the Land Clearance Commission began its relocation work, an agreement was entered into between the Chicago Housing Authority and the Commission that gave priority in the Housing Authority's relocation projects to families displaced from the Commission's site, in accord with provisions of State Act of 1947, provided, of course, that the families were eligible under the income and other eligibility requirements. This arrangement was consistent with and in part grew out of the statutory provisions of the Housing Act of 1949. The opening of the first buildings of the Dearborn Homes project was concurrent with the beginning of the Land Clearance Commission's relocation program and, consequently, the majority of the first occupants

of Dearborn Homes came from the Commission's site that was being prepared for the New York Life development.

Shortly thereafter, the City Council gave official recognition to a priority system for admission to Housing Authority projects. The following preferences were to apply in the event that the Chicago Land Clearance Commission did not have sufficient eligible families to fill available units in the relocation housing projects: B priority for families displaced by projects to be developed by the Authority; C priority to tenants of the Authority's veterans temporary projects; D priority to families displaced by the construction or development of public improvements other than those under the A and B priority; and, E priority to the remaining pool of eligible applicants.

PUBLIC HOUSING AND SLUM CLEARANCE

It was not until the summer of 1950 that the Chicago City Council approved the first group of public housing sites for development under the provisions of Title III of the Housing Act of 1949. Of the approximately 10,000 units to be built under this initial phase of the program, approximately 2,000 units were designated for construction on vacant land and the remaining 8,000 units for seven occupied sites. This latter group will necessitate the relocation of some 9,000 families and single persons, the majority of whom are Negroes.

The distribution of vacant land and occupied sites was far short of the Housing Authority's original plan to build half of the units on vacant land and half on occupied slum land so as to ease the problem of relocation. The Housing Authority plan would have permitted the eligible occupants of its own sites, as well as other agencies' redevelopment sites, to move more quickly into new public housing units and thus hasten the progress of redevelopment in the city. The objection to public housing per se, however, the nondiscrimination policy of the Housing Authority and the pressures arising from the fear of the breakdown of the Negro ghetto and the consequent dispersion of the nonwhite population, prevented acceptance of a substantial vacant land construction program. The selection of a large number of predominantly Negro-occupied slum sites to be developed for public housing can be expected to delay materially the public housing program itself, as well as other slum clearance and public improvement projects in the city. This is best expressed in the following quotation from a statement made in 1948 before the Chicago City Council by the Housing and Redevelopment Coordinator: "The controlling factor in the selection of sites . . . is the availability of vacant or near-vacant land which does not itself involve a major relocation problem."

In anticipation of the large-scale relocation operation that would be

necessitated by its federally-aided housing, by the rehousing job connected with the remaining relocation housing program, by the excess-income families in existing Chicago Housing Authority projects that must move out, and by the temporary veterans housing units that were to be abandoned, the Chicago Housing Authority materially increased its relocation staff in the fall of 1950. Subsequently site field offices were opened and the relocation staff expanded as the need arose.

OTHER PROJECTS

In the spring of 1951, the Medical Center Commission and the Board of Education once again were faced with the problem of families remaining on sites that were earmarked for early construction. As before, the Housing and Redevelopment Coordinator undertook to aid in the rehousing operation, which involved a relatively small number of families and single persons. There were approximately 60 families and single persons remaining on the Board of Education site and some 50 families and single persons on the Medical Center Commission site. No additional staff was employed for the operation, and these families were relocated soon after the assumption of responsibility by the Housing Coordinator.

CHAPTER III

THE OPERATION

ADMINISTRATIVE ORGANIZATION FOR CHICAGO'S RELOCATION ACTIVITIES

TO RECAPITULATE: there are in Chicago three general types of redevelopment requiring relocation operations:

1. Publicly initiated projects concerned with housing and redevelopment undertaken by the Chicago Housing Authority and the Chicago Land Clearance Commission

2. Public projects not primarily concerned with housing, e.g., the superhighway system, the Chicago Medical Center (including the Veterans Administration Hospital), the Chicago Park District, and the Board of Education

3. Privately sponsored institutional projects such as those of the Illinois Institute of Technology and the Michael Reese Hospital

At present, three of the public agencies have the principal responsibility for relocation activities and the administrative organization for its conduct: the Chicago Land Clearance Commission, the Chicago Housing Authority, and the Office of the Housing and Redevelopment Coordinator. As mentioned previously, the last agency is generally a nonoperating office that has assumed operating responsibility in relocation only to meet specific unfulfilled needs. Consequently, its administrative organization for relocation depends upon the special needs of a particular clearance operation. The private organizations carry on some relocation for redevelopment projects in which they are interested, but no administrative organization exists in any of them specifically for such activity. More generally these organizations have contracted at intervals with the Chicago Housing Authority or the Housing and Redevelopment Coordinator for individual relocation jobs.

PUBLIC AGENCIES—I

Chicago Land Clearance Commission.—When the Chicago Land Clearance Commission began relocation operations on the site of its Redevelopment Project No. 1 (New York Life Insurance Company) late in 1949, the Commission's relocation activities involved this site

only. The Commission has no plans for undertaking the relocation of any but the occupants of sites that it acquires itself.

Under the general supervision of the Commission members, the Executive Director of the Land Clearance Commission administers all agency operations. The Director of Management and Relocation reports directly to the Executive Director. The Land Acquisition department is on a par administratively with the Management and Relocation department. Contact between the two branches is close. A private real estate firm manages the rent collection and maintenance of the Commission's properties under the supervision of the Relocation and Management department. In general, the Land Clearance Commission has endeavored to maintain close working contact among the various departments directly concerned with site clearance to the point of demolition.

Demolition of vacant buildings has not proceeded as rapidly as buildings have been vacated. Presently, the Commission's policy is one of opening bids and letting demolition contracts to private concerns after a group of buildings has been vacated. In effect, this has meant that demolition could not take place until at least sixty days had elapsed from the time the last of a group of buildings had been vacated. There has been some consideration of revising this policy but thus far the difficulty in guaranteeing the date a given building will be vacated, due principally to uncertainties in relocation, has deterred such a revision. Consequently, even with the close relationship that exists here between management, demolition (site clearance), and relocation, delays continue to occur. When property management is assumed by a private agency, an admittedly difficult problem is further complicated.

The Commission maintains a site office for relocation and management activities. A relocation supervisor directs the activities of a number of field employees whose activities involve direct contacts with tenants, securing of vacancies and other efforts to effect movement from the site.

Chicago Housing Authority.—As in the Land Clearance Commission, the Chicago Housing Authority policies are determined by a board of commissioners under whose general direction the Executive Secretary of the Authority operates. A number of departments under the supervision of the Executive Secretary divide the responsibility for the varying tasks of the Authority.

Acquisition of new sites is the responsibility of the Director of Land Acquisition. Construction of new projects is in the hands of the Director of Development. The interim operation—relocation, property management, and demolition—is the responsibility of the Director of Management.

This program of relocation, property management and demolition is carried out by the Supervisor of Relocation, who is further charged with the responsibility of co-ordinating this work with the stage construction program of Development and the acquisition program of Land Acquisition.

Properties to be acquired are scheduled in advance for either immediate demolition or temporary conservation, depending on the time and needs of the construction program. At the time of acquisition, wrecking contracts are let for those buildings to be demolished and leases are executed for those to be conserved. The latter, in most instances, are leased directly to the tenants of the dwelling units, and are on a 30-day cancellation basis.

Relocation on a given site begins with the acquisition of the first parcel and continues throughout the entire land acquisition process. This, coupled with an on-site management program, assures maximum use of vacancies in the interest of relocation. Leases, maintenance of property, rent collection, and termination of tenancy are the responsibility of the field offices, as are relocation and demolition. In this respect, the Authority operation is closely akin to that of the New York Housing Authority; a total program of site management. Otherwise, in the details of its relocation program, its relocation operation closely parallels that of other agencies in Chicago.

Since May 1949, the relocation staff has helped in the rehousing of some 1,200 families. Some 8,800 additional families are living on sites approved by the City Council and scheduled by the Authority for clearance under its present program.

PUBLIC AGENCIES—II

Chicago Medical Center.—The Medical Center Commission has no relocation program. The Office of the Housing and Redevelopment Coordinator's relocation service has helped to move families from a few of its sites but for the most part, the Commission has relied entirely on eviction proceedings to vacate property that it needs as its building program goes forward. The Commission controls some residential properties for a considerable length of time before they are scheduled for demolition. The Office of the Housing and Redevelopment Coordinator has urged that the Commission maintain tight control over vacancies occurring in such properties for the rehousing of families living in structures on sites scheduled for immediate clearance. In the past, these vacancies have not been effectively utilized for relocation.

Subways and Superhighways.—The City and County Subway and Superhighway Departments likewise do not have their own relocation

programs. It has already been noted that these departments have contracted with the Office of the Housing and Redevelopment Coordinator to carry out relocation operations on the highway sites. Details of those operations are described in a later section.

PRIVATE AGENCIES

Michael Reese Hospital.—On the Michael Reese Hospital site, all land acquisition and relocation functions are the responsibility of the Chicago Housing Authority under the terms of the contract between the two agencies. Contracts for demolition are let by the Housing Authority as the land is needed by Michael Reese Hospital. Since the Hospital's program is designed to proceed rather slowly, the policy has been one of maintaining a maximum number of existing units for as long as possible. This arrangement, whereby a public agency contracts to acquire land and relocate tenants from the site of a private institutional redevelopment project, is unique in Chicago's relocation experience.

Illinois Institute of Technology.—Relocation on the Illinois Institute of Technology site has been the task of the Institute's Treasurer and Executive Secretary. Until the fall of 1950, no specific staff was maintained for relocating some 1,000 families on the proposed campus site.

In 1941 the Institute acquired property on the South Side of Chicago in one of the most blighted sections of the city, as a part of its proposed 110-acre campus development. Included in this acquisition was an apartment house known as the Mecca Building, built in the 1890's at the time of the Columbian Exposition. This building was destined to become a symbol of the gigantic task of all relocation in the city. It had been generally recognized as unsafe and unhealthy, but, nevertheless, housed at least 250 to 300 Negro families in its 175 apartments. Serious overcrowding and major municipal code violations made the building extremely hazardous, and consequently, the Institute planned to demolish the structure by the fall of 1942. At that time, however, due to protests of various organizations, including the Urban League, the Chicago Metropolitan Housing Council, and the National Housing Agency, all concerned with the acute housing shortage, the City Council Committee on Housing intervened and the razing was postponed until the spring of 1943. Tenants' leases were terminated as of May 1, 1943, and the Institute then applied without success for a permit to wreck the building. Shortly after this, the Institute started forcible entry and detainer test cases against tenants, but the Municipal Court refused to approve eviction proceedings.

Up to this point, the Institute, as a private institution faced with a delay in its construction program because of an inability to evict site tenants, had taken no steps aside from those described to find other methods of moving tenants, i.e., no relocation program had been seriously contemplated. The City was unable or unwilling to assume responsibility for helping to remove these families from the site. By the end of June 1943, notices had again been sent to tenants demanding that they vacate and stating that those who remained did so at their own risk. Each tenant was given the option of vacating the premises at any time with a pro-rata rent rebate from the Institute. At the same time, the Institute adopted a policy of not re-renting apartments as they were vacated. Both of these measures proved to be relatively ineffective and for the next few years nothing was done towards removing tenants and wrecking the building.

A letter to the Office of the Housing Coordinator on February 13, 1948, summarizing the Institute's relocation problem, indicated that in proceeding with certain buildings it had had to alter the site plans in several instances in an attempt to "solve the relocation problem." The Institute recognized that further "manipulation" of site plans was nearly impossible. Families had to be relocated if the ultimate campus plan was to be achieved.

Late in 1948, in reply to a letter from the Housing Coordinator containing a complaint signed by several persons living in structures owned by the Institute, the Institute's President acknowledged that the housing in the area was thoroughly inadequate and unsatisfactory. He stated that the Institute's development program was "predicated on the assumption that this space will be used for educational purposes and . . . the present buildings are completely outmoded and should be wrecked . . . demolition has proceeded very slowly out of consideration for the residents. . . . Every attempt has been made to help the residents secure alternate housing in such cases (and) in all but a few instances these attempts have been successful." He stated further, however, that "There is no way in which the Institute can provide re-housing for the people who will be displaced. Most of them will require subsidized housing of a character which only a public agency can provide. The petition simply points up again the responsibility of the City of Chicago to meet its obligation to provide people with decent housing."

The Institute contended further that while the construction of Dearborn Homes and the relocation housing would make for some progress toward solving this problem, the number of such units contemplated would fall far short of meeting the need. It should be pointed out that the Illinois Institute of Technology, being a private institution, has had

extreme difficulty in securing admittance of its relocatees into public housing under the priority system referred to on page 422-23.

By the spring of 1950 little progress had been made. The Institute urgently requested the assistance of the Housing and Redevelopment Coordinator in helping to relocate the Mecca Building tenants. A survey of the building was undertaken by the latter office shortly thereafter. The results of the survey were forwarded to the Treasurer of the Institute with the recommendation that he hire at least one full-time relocation employee to work constantly with the occupants of the building to assist them in finding new quarters and to prevent new families from moving into vacated apartments. It was also suggested that the July 1, 1950, legal termination of occupancy be postponed for at least one year. One relocation worker was subsequently employed, and the legal termination date delayed.

The land acquisition program of the Institute has been one of completing purchases as satisfactory agreements are reached with the property owner. The Institute does not have the power of eminent domain. Property management of purchased buildings is divided among several real estate firms. This has been done as a means of encouraging the good will of a segment of the community. On the other hand, it has often served to hamper relocation efforts to the extent that rather loose controls over occupancy have resulted. Demolition contracts are let to private wrecking companies and are released as buildings become vacant. The Treasurer of the Institute has direct control over the staging of demolition.

GENERAL RELOCATION POLICIES

Outside the area of administrative organization, the framework within which relocation must operate, the common goal of redevelopment for the city, necessitates comparable policies for each public agency concerned with relocation operations in Chicago.

One policy that has been established by all three public agencies with relocation programs is the general one of "no evictions." Although some of the private and public institutions with redevelopment projects have relied, in the past, on eviction proceedings to clear sites as they were needed, it is now apparent that any aspect of Chicago's redevelopment program cannot be accomplished by the use of eviction proceedings to move large numbers of families from a given site. Neither sound nor expeditious relocation will be achieved by the exclusive or prevalent use of this device.

To the extent possible within each program, low rent public housing units are utilized to relocate families. The publicly financed relocation

housing will have provided about 2,250 units (including Dearborn Homes) by the end of 1952. In addition, Chicago's 1950 federally-aided public housing program calls for approximately 1,500 dwelling units to be built on vacant land. The total to be built in the next two or three years can presumably provide for approximately 20 per cent to 35 per cent of Chicago's relocatees who come within the scope of the present program. In order to allocate these units among the several redevelopment projects in the city, the system of priorities referred to on pages 422-23 was established.

For the most part, the public agencies concerned with residential redevelopment in Chicago have not effectively geared the policy of site clearance and construction by stages with relocation. The effect on relocation has been an inability to utilize vacancies that occur on inactive portions of a site. Under the Land Clearance Commission program, in which the private redevelopers may not want to undertake a program of construction by stages, such a plan for relocation is obviously made difficult. The nature of highway construction, however, is such that development by stages is most feasible. Consequently, the Housing Coordinator's relocation service has been able to move a number of families from active clearance sections of the highway route by temporarily rehousing them in vacancies occurring in inactive sections. Such action necessitates effective and continuing control over these vacant units, and is made truly effective by relating site clearance, management and displacement.

THE RELOCATION PROCESS

The procedures followed by the agencies carrying on relocation operations in Chicago are, for the most part, similar. The size of each project, the number of families and nonresidential occupants to be moved, composition and race of families, and the tentative construction target date may vary such things as the number of relocation workers and the type and number of site offices from project to project, but the basic operations remain the same. To illustrate the process as it has evolved, the procedures followed by the Housing and Redevelopment Coordinator's relocation staff on the Congress Street Superhighway are cited and commented upon below.

The site survey.—When an area is designated for active clearance, a survey of the area is made. This includes social and economic data of the residents, as well as facts on dwelling units and structures. The information gathered in the course of the survey is entered on individual cards for each tenant and each structure. Thus, data for the area are in a form suitable for use as the basic record in the relocation site office.

The survey constitutes the first direct personal contact with the families to be relocated, except where owner-occupants may have been dealt with in the acquisition of the site. The survey workers may or may not be the same persons who later become relocation site workers. In either case, it has been found advisable to prepare the survey workers with an explanation of the general program and of the relocation policies to be adopted.

An analysis of the survey is made with respect to the number of families and nonresidential tenants, racial and family composition, family income, rent and dwelling space. The nature of the necessary field work is thus indicated, and a tentative timetable for clearance may be established, based on at least some estimate of the magnitude and difficulty of the relocation work to be done.

Contacts with site occupants.—A tenant relocation office (or offices if the site area is large) is established in a convenient section of the site and a relocation supervisor assumes general responsibility for the task of moving tenants. The typical relocation staff consists of supervisory personnel, residential site workers, nonresidential site workers and one or two clerical workers.

Once the site office has been established and the preliminary steps completed, relocation proper is ready to begin. It involves a series of contacts with various individuals and groups—contacts with relocatees, general contacts with outside agencies, and specific operating contacts.

Contacts with the families to be relocated are site work contacts. The relocation office is chiefly engaged in persuading tenants that it will be necessary to move from the site. Direct contacts are made by both letter and personal interviews. With the opening of the site, official letters are sent to all tenants informing them of the general nature of the program, explaining the situation that makes it necessary for them to move, notifying them of the establishment of the relocation site office and describing its policies. Another important task is putting rumors to rest before they reach disastrous proportions. Tenants are assured that efforts will be made by the relocation office to aid them to the greatest extent possible in finding new quarters but, at the same time, urging them to do everything possible to take care of the job themselves. This last point is continually stressed in all contacts with site tenants in order that they not rely solely on the relocation office. Similar follow-up letters are sent out periodically. These letters contain information on progress of site clearance, changes in policy, and other pertinent facts and are designed to provide information as well as to make the tenants constantly aware of the fact that they must move.

In most cases these letters play a subsidiary role to personal contacts by the relocation staff. A minimum staff is retained in the office to

answer telephone inquiries, take public housing applications, and interview tenants who visit the office. Most of the time of the site workers is spent in the field visiting families, becoming thoroughly acquainted with the residents of the area, looking for vacancies outside the area, effecting moves where possible, checking on plans of the residents, seeing outside agencies that can be helpful in the relocation program and, in general, constantly informing residents of the area of all details pertinent to the operation. With these calls, the neighborhood becomes thoroughly aware of the fact that relocation is actually proceeding.

Two elements that serve to hasten the relocation process are present on the Congress Street Superhighway site. Except for the Medical Center, they have not been operative on other redevelopment sites in the city. Both of them are the result of a program of construction by stages. One has already been mentioned. Vacancies occurring in owned property on the right-of-way in areas not yet ready for clearance are used temporarily to house families from active areas. (This measure, of course, facilitates site clearance, but in no way reduces the relocation load.) In order to make this possible, it is essential that such vacancies come under the control of the relocation office. Although this method involves inconvenience to the family moving twice or more, it is a feasible method for clearing an active site as quickly as possible. The second factor is an indirect and psychological one. Despite the fact that it is often difficult to convince site occupants that the relocation office "means business" and that clearance actually will take place, when demolition is under way in one area on the route, clearance becomes a fact accepted (in varying degrees) by all who live in the vicinity. The closer residents are to the already demolished areas, the more apparent to them is the fact that clearance is proceeding. This may, however, increase apprehension unless an effective relocation program is also being carried forward.

Other indirect contacts with relocatees are made in a number of ways. Large signs showing the area to be cleared and the purpose of clearance are erected at several strategic points on the site. Smaller signs are attached to each purchased building in the clearance area showing ownership in the public agency, indicating that the building will be demolished, and warning against trespassing if the building is vacant. These, too, serve as constant reminders that a project is under way. Again, however, it should be noted that these latter overt evidences of activity are site clearance devices and are not substitutes for a relocation program.

Demolition.—Demolition of vacant structures on the active site itself has a similar effect on site occupants. The more buildings demolished, the more obvious it is that progress is being made and the time limit

for remaining on the site is coming closer. Equally important for our purposes, however, is the fact that demolition serves as a psychological pressure upon the official agency to assess its activity and to assure progress with its relocation program. The test of a good relocation program does not hinge on the number of demolitions (i.e., speed of site clearance); its success is related to its ability to relocate the site residents in accordance with statutory provisions and with a decent conception of social and public responsibility.

At the beginning of the program the co-ordination of relocation and demolition activities was rather loose. Allowing buildings to stand vacant for a considerable period of time invites many difficulties. Vacant buildings become "attractive nuisances" and hazards in spite of no trespassing signs. Also in view of the housing shortage the space is often seized by squatters or, if not, then resentment may develop against the mere fact that such units remain standing vacant. At present, the management agency is notified as soon as a building is vacant and the units are made uninhabitable by removing plumbing fixtures and windows. Actual demolition sometimes involves a series of contacts between the relocation office, the redeveloping agency, and the wrecking company after a group of buildings has been vacated. In so far as immediate demolition is advantageous to further relocation, the complexity of this arrangement has tended to hinder the progress of relocation.

Management.—Until the site is cleared it is usually necessary for the management agency to make some repairs on occupied structures. Since the buildings are scheduled for demolition, these temporary repairs are kept at a minimum. This has often resulted in a speedier movement from the site by occupants of these buildings. A policy of "planned discomfort" cannot be adopted by a public agency. However, the fact that property management is carried on outside of the official relocation agency serves, in part, to achieve this result.

Evictions.—The one or two evictions that have occurred on the highway site since the beginning of the relocation program have been for nonpayment of rent. Rent collection is handled by the property management firm and evictions for nonpayment of rent are its responsibility. The over-all policy of the relocation agency, however, must be considered when such a situation arises and it is desirable to proceed slowly with these cases. At such times there is close operating contact between the relocation office and the property managers.

Public relations.—Still another way in which contacts are made indirectly with site tenants is through the newspapers. The public relations policy of a relocation agency is of basic importance to the success of the program. The communication media can facilitate relocation or

they can greatly hinder the process. No intense effort has been made to obtain publicity in the metropolitan or community press. To the extent that the public is given to understand that an active program is under way, such stories have been valuable. They have, however, also aroused protests against the demolition of residential structures.

An effort has been made to maintain close and friendly contact with the press so that protests or adverse comments will be checked with the relocation office before they are published. In this connection, the fact that the relocation office can say that eviction cases have been practically nonexistent has proven extremely valuable. Likewise, citing types of concrete assistance afforded in making suitable rehousing available to tenants also has served to allay opposition. However, care must be exercised in the use of publicity regarding rates of relocation, site clearance and construction plans to avoid obvious conflicts that may develop among these phases of the proposed project.

Vacancies—private and public.—It is obvious that in the face of a vacancy rate of less than one per cent in Chicago since World War II, the relocation office has not succeeded in finding a large number of vacancies in the private housing market that relocatees can move into. Field workers from the relocation office, however, attempt to get in touch with all landlords in the neighborhood of the site for any vacancies that do exist. Where it has been possible to place a site occupant in the vicinity of his former residence, as would be expected a minimum of disturbance in the relocatee's life has generally resulted.

Contacts with private real estate firms are also a part of field operations. Appeals are made to these firms for option on at least some of their vacancies in both rental and purchase housing. Appeals have also been made to real estate boards. Newspaper ads are checked each day and personal contacts are utilized when possible. The total of these contacts comprises the private housing listings which the relocation office tries to maintain.

Continuous operating contact is maintained between the relocation office and the tenant selection section of the Chicago Housing Authority. By agreement with the Authority, the highway relocation office has taken applications for public relocation housing directly from the tenants on the site and forwarded them to the tenant selection staff for final review. A member of the relocation office has been assigned to supervise the taking of public housing applications and to act as liaison between the Housing Authority and the highway relocation office. Relocation of eligible applicants in public housing has been facilitated considerably by this last measure.

Use of notice.—The legal powers the public agency possesses likewise play a role in relocation. Evictions are rare but termination of ten-

ancy notices at critical stages are sometimes necessary in any relocation operation, particularly where nonresidential tenants are concerned. Termination action goes to the court through the property management firm at the request of the relocation office and members of the relocation staff are present at all court hearings.

In some cases site tenants have purchased occupied dwelling units in order to move from the site. Occupancy by a site tenant has occasionally necessitated eviction of the occupant of the newly purchased unit. Relocation personnel have at times assisted site tenants in carrying out these off-site evictions through the courts. No evidence is available to indicate that assistance has been given the evictee in finding new housing.

Social agencies, community organizations, and political considerations.—Social agencies are of importance in relocation operations and are sometimes used to facilitate movement of families from the site. The relocation staff knows which of its tenants are receiving assistance from public or private welfare agencies. When informed by the relocation office of the necessity for a client's moving from the site, the welfare agencies have at times been willing to raise rental allotments or to issue emergency checks to cover moving expenses.

Community organizations and neighborhood churches at times have helped in preventing or reducing opposition to relocation. It, however, has often been difficult to determine the best time for enlisting their aid in carrying out relocation. Improper timing may result in increased opposition to both relocation and the redevelopment project. Here again it becomes evident that the relocater must do more than merely find ways to move families from a site. In addition to applying the techniques of relocating a family, he must assume responsibility for creating a public understanding and acceptance of the project. Effective dissemination of information rarely precedes him. The point made earlier is emphasized: the relocater too often is the public's first point of contact with redevelopment. Relocation must "sell" the redevelopment program. The attendant confusion surrounding such a chaotic situation underscores the need for thinking through relocation early in the planning process.

There have been a few organized protest movements in the course of the highway relocation program. At protest meetings, a member of the relocation staff attempts to explain the program, and, if possible, suggests that a small committee be elected to confer with officials of the relocation agency. In some cases it has been found that the mere designation of such a committee serves to dissipate discontent for the group as a whole. In any case, these committees are always given careful consideration and invited to confer with officials of the agency. Similarly,

the community advisory committees set up to give advice to the Housing Authority's relocation staff and to explain its relocation program to site occupants are believed to have expedited relocation on the Authority's Dearborn Homes site.

Political opposition to the continuation of the highway relocation program has developed occasionally. Ward committeemen, precinct captains, and aldermen all are concerned with the voting composition of their community. Constituents that live on the site often request assistance from them. In order to avert or reduce such political opposition conversations have been held with the aldermen and ward committeemen representing the areas involved. The protests of relocatee constituents channeled through these officials have been given prompt consideration. Information about the program is supplied and meetings are held whenever they seem appropriate.

Other tools.—Prior to the current program little attention was given to the problems of relocating nonresidential establishments. The highway experience has shown that often more time is required to move a nonresidential tenant than a family. In any case, if pressure is not placed on business and commercial establishments on the site, residential tenants have been reluctant to move. Residential relocatees generally feel that no urgency exists when the nonresidential establishments are unmolested. Further, resentment results from any urging of families without simultaneous pressure on business and industry. On the other hand, as nonresidential relocation proceeds, residential tenants frequently take definite steps toward moving when the neighborhood grocery store, tavern, or employer has left the site.

The movement of residential structures to vacant land off the highway right-of-way was made possible under an act of the State Legislature in 1949. Because a number of dwelling units would be saved and a comparable number of families moved from the site, such a plan would serve as an aid to many relocation programs and so deserves consideration. It has been recommended for a portion of the Congress Street Superhighway.

Financial assistance to relocatees also has been given limited consideration by Chicago's relocation agencies. Assistance has been given to Congress Street Superhighway relocatees in the form of payment for moving costs or for one to two months' rent when warranted by a family's economic status. The use of bonus payments for vacating site dwellings has generally been frowned upon by public agencies in Chicago. In fact, there is little evidence that any but the most limited use has been made of bonuses in the Chicago experience thus far. The New York City Housing Authority, on the other hand, in clearing one of its sites in 1949 and 1950 paid bonuses amounting to \$75,000 for 182

families, or an average of \$412 per family. Payments were made according to the size of the unfurnished unit vacated and only to families not eligible for low-rent public housing and not receiving public assistance. The New York City Housing Authority estimates that two-thirds of these bonus families would not have been relocated without such inducement. It seems safe to say that greater financial assistance by redevelopment and relocation agencies would undoubtedly expedite the movement of families from redevelopment sites.

CHAPTER IV

FEDERAL POLICY

THE influence of the federal government policy on relocation generally, and more specifically in Chicago, calls for special emphasis and attention. The provisions of the Housing Act of 1949 require assurance, from a local agency applying for federal aid for slum clearance under Title I of the Act, that the rehousing needs of families living on sites to be cleared will be met.¹ This assurance must be submitted by the local slum clearance agency in the form of a feasible plan for relocation. Although no specific provisions regarding relocation were incorporated in Title III of the same Act, which provides aid to local authorities for construction of public low-rent housing, it was soon apparent that planning for relocation would be a necessary adjunct to the administration of this section and that policy decisions involving relocation would have to be made.

More than a year elapsed after the passage of the Act before definitive policies on relocation were formulated by the Division of Slum Clearance and Urban Redevelopment, the unit of the Housing and Home Finance Agency responsible for the administration of Title I. During the same period, the Public Housing Administration was also shaping relocation policies, though somewhat less definitively than the Division.

The work of the Relocation Committee on the National Association of Housing Officials contributed substantially towards the understanding of the problems of relocation and the measures required to cope with these problems. Many of the recommendations of this committee, working jointly with officials of the Public Housing Administration and Division of Slum Clearance and Urban Redevelopment, have been in-

1. Housing Act of 1949, Title I, Sec. 105:

"Contracts for financial aid . . . shall require that . . .

"(c) There be a feasible method for the temporary relocation of families displaced from the project area, and that there are or are being provided, in the project area or in other areas not generally less desirable in regard to public utilities and public and commercial facilities and at rents or prices within the financial means of the families displaced from the project area, decent, safe, and sanitary dwellings equal in number to the number of and available to such displaced families and reasonably accessible to their places of employment. . . ."

corporated into the basic policy statements issued by these two federal agencies.²

Along with certain general principles: that no mass or arbitrary evictions be permitted; that within a community the relocation operations of local agencies should be basically uniform; that arrangement should be made for enlisting the co-operation of other community groups and agencies; that costs incurred in the assistance rendered to relocatees should be included as part of the total cost of development; that local public agencies retain at all times a direct responsibility for control of site clearance activities; that there is an important and necessary relationship between the functions of relocation, land acquisition and management; and that a properly staffed relocation service under competent supervision is essential to meet relocation needs in a project area—the federal agencies have incorporated other, more specific elements into their policies on relocation. As noted previously, the Division of Slum Clearance and Urban Redevelopment has gone further, as required by the law, than the Public Housing Administration in delineating its policies. The requirements of both agencies, however, embody two major elements; (1) the assumption of public responsibility for relocation and (2) the necessity for co-ordinated effort within a locality in relocating displaced site occupants.

RELOCATION PLAN

To secure approval for a proposed project the local redevelopment or public housing agency must submit a relocation plan to the federal agencies.

The plan submitted for Title III projects must show the feasibility of relocation by inclusion of: (1) an estimate, by race and income, of the number of families to be displaced; (2) recognition of any restrictions in the supply of housing for minority group families; (3) recognition of the demands of any other relocation that will take place in the community; (4) approximate length of time necessary for the displacement of families; (5) policies and procedures that will be followed in administering the relocation plan; (6) notification to families of the availability of advice and assistance in finding other quarters; (7) a demonstration that site families eligible for public low-rent housing can be offered such housing or that they can *reasonably* be expected to find temporary dwellings and later be accommodated in public housing projects; (8) a demonstration that families not eligible

2. "Slum Clearance and Urban Redevelopment Program," *Local Public Agency Manual*, Part II, chap. 6; "Relocation and Rehousing Planning," *Public Housing Administration Low-Rent Housing Manual*, Sec. 213.2: "Relocation of Site Occupants."

for public housing can *reasonably* be expected to find accommodations *no worse* than those on the site and at rents within their financial means. The local authority must conduct a survey of site occupants to determine individual family rehousing needs. These provisions are an extension of the Public Housing Administration statement of policy issued after the passage of the Housing Act of 1937 and discussed earlier.

The Division of Slum Clearance and Urban Redevelopment, in addition to items (1) through (6) listed under requirements, specifies that in demonstrating workability the local slum clearance agency applying for aid under Title I must include in its relocation plan: (1) the number of displaced families eligible for public housing and the extent to which relocation activities will be geared to any public housing projects being planned in the locality; (2) the number of families for whom private housing will be needed and means for locating private market vacancies; (3) the vacancy ratio in the existing housing market; (4) the new residential construction rate for families not eligible for admission to public housing and other housing resources available to site families; (5) the prospect of in-migration of defense workers and the effect of this on the local housing supply; and (6) the procedure that can be followed in a stage-by-stage redevelopment of the project area.

REHOUSING REQUIREMENTS AND ASSISTANCE

Title I allows the temporary rehousing of site families as a stopgap arrangement only if necessary. Under Division of Slum Clearance and Urban Redevelopment policy, however, this provision in no way relieves the local redevelopment agency of the responsibility of assuring that permanent rehousing facilities which meet the statutory requirements will be made available to families temporarily rehoused. Also, the local agency must explain the necessity for making use of temporary facilities. Temporary rehousing must be provided at rents that are reasonable in relation to those paid by the families for their site dwellings and, generally, must be "not less desirable in character." To meet the permanent rehousing requirements, the local agency must assure that these housing facilities are or will be available to site families (particularly to minority group families) at rents or prices "within their financial means," are "decent, safe, and sanitary," and are reasonably accessible to the places of employment of wage (or salary) earners in displaced families.

Generally, housing accommodations voluntarily found by site families themselves, with no aid from the local agency's relocation service,

are not subject to the above requirements, provided, (1) that the family moves voluntarily after receipt of formal notice of availability of relocation resources and services, and (2) that the agency's relocation resources continue to be made available to any families that have moved voluntarily to unsatisfactory accommodations.

As noted previously, direct financial assistance to families being relocated has been approved by both DSCUR and PHA only to a limited extent—a "reasonable" amount for moving expenses plus a "reasonable" amount for the first month's rent in appropriate quarters will be approved only if all other "reasonable" means of assistance have been exhausted and the aggregate amount does not exceed the cost that would be incurred for eviction proceedings, or where it can be demonstrated that otherwise unusual delays would result. Further financial payments to relocatees must be specially requested (if they are to be included as part of the development cost for Title III projects or as part of gross project cost for Title I projects) and fully justified before federal approval will be given for them. It has been felt by many local agencies that more liberal provisions for financial assistance to site occupants are necessary if relocation is to be facilitated.

METHODS FOR CO-ORDINATION

To carry out rehousing responsibilities in a locality where programs are being undertaken by several agencies, careful attention must be paid to co-ordinating relocation activities of all agencies involved "to avoid duplication of effort . . . and promote better understanding of, and sympathy for the program(s) among the families being displaced as well as in the community at large."³

The federal agencies suggest three possible methods for the operation of relocation services in a locality:

1. A relocation staff may be established within each agency, depending on close liaison among the personnel of the agencies to achieve the necessary co-ordination. This method may serve best for the integration of relocation, land acquisition and management of site properties within each program. On the other hand, its effectiveness in preventing overlapping activities or duplication of effort is questionable.

2. All relocation may be made the responsibility of one of the agencies involved, possibly the local housing authority. There should be adequate provision for reimbursement of costs for the amount of relocation attributable to each agency. The advantage of this method is the close co-ordination in the use of public housing units for relocation.

3. "Relocation of Site Occupants," *Public Housing Administration Low Rent Housing Manual* (dated May 15, 1951), Sec. 213.2.

A local housing authority, however, with a sizable program of its own (both existing and proposed projects) may be unwilling or unable to take on such a large job.

3. A separate centralized relocation service, charged with this responsibility by the agencies in the locality, may be created. Such a service may be responsible to the mayor or a board composed of representatives of all public agencies engaged in relocation activities in the locality.⁴ A centralized service may be the most effective tool for providing the necessary over-all co-ordination for relocation among all agencies. On the other hand, it may not prove effective for co-ordinating relocation activities with site acquisition and management in so far as these activities must be controlled by the individual agencies.

SUMMARY

The emergence of public responsibility in relocation is seen nowhere better than in the evolution of federal policy—legislative and administrative.

The passage of the Housing Act of 1937 was essentially a public works and public welfare device. The initial object was clear: site clearance and site preparation for the construction of public housing projects.

Very soon the United States Housing Authority expanded its perspective and noted, "No aspect of the United States Housing Authority aided program requires more careful treatment than the relocation of site occupants. Local authorities are urged . . . to exert every effort to relocate site occupants in decent, safe and sanitary dwellings well in their financial reach." Initiative, however, rested with the family.

The passage of the Housing Act of 1949 firmly fixed a definite relocation responsibility on the public agencies proposing projects for construction under Title I of the act. It required them to face the problem of relocation and cope with it. Relocation took its place as a co-equal with site clearance. The Public Housing Administration in administering Title III of the act requires a public agency to prepare and submit a *feasible* relocation plan. This means public housing, existing or prospective, for eligible families displaced and a showing that units comparable to those occupied by the site residents are available elsewhere to site occupants ineligible for public housing.

Although Title III relocation is somewhat more than site clearance,

4. A fourth method, not suggested by the federal agencies, would be the obtaining of a relocation service by contract with a private or quasi-public agency. Actually, this would be another form of centralized relocation differing only in that it would carry the operation outside of the confines of public agencies and would probably necessitate contracting for management operations as well as for relocation.

it falls short of the full public responsibility, required by the statutory provisions of Title I, to see that site occupants are rehoused in decent, safe and sanitary dwellings. Relocation under Title I is not complete until all families not moving "voluntarily" have available to them "decent, safe and sanitary dwellings." The discrepancies between the two federal policies have been recognized by both federal and local agencies. Attempts to bring federal policies closer together have met with some success, particularly as to financial payments and relocation plans. The limited financial payments authorized for Title III, discussed previously, have now become part of Title I policy; a relocation plan required by statute under Title I must now be submitted also for projects constructed under Title III.

In passing, it should be noted that limited recognition has been given the relocation problem by the Bureau of Public Roads, an agency of the federal government, in its publication, *Relocation of Tenants to Expedite Construction of Arterial Routes*, issued in 1947. This statement did little more than retell the limited experience of a few cities in relocating residents along the right-of-way of proposed highways. The device most generally referred to was physical movement of the residential structure from the highway's path to other sites. The device proved costly and is limited in application.

CHAPTER V

CONCLUSIONS AND COMMENTS

HISTORICAL

THE foregoing pages have outlined the progress of relocation policy and practice between the 1930's and the present. During these years, growth has taken place with respect to both the size of the task and the approaches to its accomplishment.

As an outgrowth of the social concepts that emerged during the depression years, relocation first gained recognition as a public responsibility. In keeping with the times, however, that responsibility was delegated to the welfare agencies rather than assumed by the public developer. The Housing Act of 1937 was generally an extension of the welfare principle and provided that the administrative mechanism for undertaking relocation should be in the housing agency. Financial assistance for relocation could be included to a limited extent as part of the redevelopment cost under the federal-aid program. The co-operation of welfare and relief agencies, however, was sought to the greatest extent possible before such assistance was given. It should be noted that, although relocation was recognized as a public responsibility, the public agency made clear at all times that the final responsibility rested with the family to be relocated and the policy was predicated, in part, on the exertion of pressure on families to assume the initiative in finding another house. This approach necessarily became flexible in application because it related directly to the availability of housing. As the supply of available housing dwindled to the vanishing point, so inversely did the public responsibility for relocation increase. Private redevelopers did not relocate families, they simply evicted them to shift for themselves. This was the general practice until the end of World War II. The critical housing shortage, however, made this practice indefensible for the public and large private developer. This fact was underscored for the first time in 1945 when a private redeveloper (Metropolitan Life Insurance Company) undertook to give assistance in finding housing to some 3,000 families on the site of Stuyvesant Town in New York City.

After World War II, redevelopment plans requiring relocation began to appear in unprecedented volume. Relocation demanded consideration if redevelopment were to proceed beyond the planning stage. The

size and difficulty of the task began to become clearer and this recognition finally culminated in 1947 in legislative provision by the State of Illinois for public relocation housing.

Two major obstacles have hampered relocation during the postwar period—the housing shortage and the fact that the majority of relocatees are minority-group families. Traditional practices of residential restrictions against racial minorities have compounded an already critical task in a period of short housing supply.

With the passage of the Housing Act of 1949, the relocation task assumed almost overwhelming proportions. In Chicago, the quantity of redevelopment projects planned necessitated some kind of priority system for proceeding with relocation. This was established for the use of public housing relocation projects. That the majority of families to be relocated in Chicago are above the public housing income levels but below those that would enable them to compete effectively in today's housing market of short supply at a price level they could afford is a fact—a fact that the relocation official must face but that he obviously is in no position to correct.

ADMINISTRATION

Administratively considerable progress has been made. Public agencies in Chicago concerned primarily with housing and redevelopment have by this writing provided for relocation in their administrative organization. The place of relocation, however, varies—from a staff function to an operation function substantially removed from the chief executive.

Private agencies and public nonhousing and redevelopment agencies have made little administrative provision for relocation due in large part to their unwillingness or slowness to recognize the existence of a problem. More recently, they have made arrangements with other public agencies to carry out specific relocation operations.

Redevelopment under the Housing Act of 1949 has brought into focus the public agency's responsibility for relocation. Although certain aspects of the federal agencies' policies with respect to legal and financial responsibility in relocation are still the subject of debate, the over-all responsibility has been firmly established.

Federal agency policy formulated since 1949 has adopted the following general principles: that there should be no arbitrary eviction; that relocation costs should be a part of total redevelopment cost; and, that there should be basic uniformity in the relocation operations of local agencies.

The limited financial assistance to families to be relocated allowed

by the federal agencies may well restrict the progress of relocation, particularly in connection with public housing projects. At present, a "reasonable" amount for moving expenses and a "reasonable" amount for the first month's rent in new quarters are approvable under certain circumstances. All other "reasonable" means of assistance, however, must first be exhausted.

No one method for putting relocation activities into effect has been suggested as universally applicable or desirable. The question of whether relocation should be administered by each agency, or whether relocation should be centralized in one is a problem to be resolved in each locality after the pros and cons of each method have been carefully considered.

Of prime importance for redevelopment is the necessity for taking full account of relocation considerations during the planning stages of redevelopment. The Metropolitan Housing Council in 1935,¹ the Stuyvesant Town relocation bureau in 1946,² the Chicago Housing Authority in 1948,³ the Housing and Redevelopment Coordinator in 1950,⁴ all expressed concern with the unplanned removal of site occupants because they recognized that the removal of large numbers of families from a redevelopment site could well create new slums elsewhere in the community. Although concern has been expressed, relatively little has been reflected in practice. The principal advance so far has been greater understanding of problems and steps toward uniformity of policies.

Equally important is the necessity for preparing the way for relocation. The redevelopment program and the relocation necessitated by it should be presented to and accepted, at least in considerable part, by site occupants and the community at large before the relocation operation begins. To the greatest extent possible relocation operations must be interrelated with land acquisition, management and demolition. More importantly, however, the relocater must not be placed in the anomalous position of having to sell the redevelopment program before he can make headway with his own operation and to do this selling in the face of opposition that has been aggravated by earlier neglect of those families and groups on whom urban redevelopment, at best, will work some hardship and inconvenience.

1. *Finding New Homes for Families Who Will Leave Public Works Administration Construction Areas in Chicago* (Metropolitan Housing Council, 1935).

2. *3,000 Families Move to Make Way for Stuyvesant Town* (New York: James Felt & Co., Inc., 1946).

3. *Memorandum on Relocation: Chicago Housing Authority Experience* (Chicago Housing Authority, 1948).

4. "Recommendations on Relocation Report" (Submitted to the Committee on Housing, City Council of Chicago, by the Housing and Redevelopment Coordinator, December 12, 1950).

In summary, the Chicago experience has pointed up certain principles that must serve as the framework for any relocation operation:

1. Co-ordination of relocation activities with those of land acquisition, management, and demolition
2. Establishment of a priority system or time schedule among the public or private organizations whose project sites require sizable relocation operations
3. Maximum utilization of public housing vacancies for relocation
4. Establishment and maintenance of contact with all organizations that might possibly provide such vacancies
5. Enlistment of the co-operation of neighborhood, civic and political groups
6. Co-ordination of the various relocation programs within a community

In addition, new construction within the financial reach of relocatees must be stimulated to the greatest extent possible. This is particularly urgent for Negro and other minority groups.

SOME PROBLEMS AHEAD

Several critical questions concerning relocation still remain unanswered at this writing. To a great extent they are policy determinations that are basic to the entire framework of relocation operations. They must be answered in the light of the conditions and requirements of the individual locality. The federal agencies have, in part, provided general guides on these issues. In some instances they have not been adequate or definitive enough for local agency needs. The importance to the success of relocation operations of the following elements is such that they warrant immediate attention and a concerted effort toward their resolution both at the federal and local levels.

1. *Relocation: Yes or No?*—Given the body of material assembled here augmented by related stories in every large city undertaking public works, housing and redevelopment programs, a question naturally arises as to whether the cure—housing and redevelopment—is worth the medicine—relocation. Are we creating more damage than benefit with programs of site clearance involving “futile” relocation in a period of vanishing vacancy rates and inadequate available housing? Although no definitive answer can be provided, the impact of the relocation load is sobering. Can we afford to undertake relocation without considering first things first:

a) A priority schedule for public projects and large-scale private projects. No one agency can espouse its objectives without recognizing that it is not the only activity requiring relocation, is not necessarily

the most important one, and is only one part of city-wide development and redevelopment.

b) A recognition that there are substantial numbers of structures within the city that are a positive hazard to their occupants and a menace to the public health and safety. Are we in a position to say conclusively that occupants of these units should not be relocated preparatory to closing or demolishing the structures that house them, even though these structures may not be within an active redevelopment area?

c) An objective determination of whether the city can afford public housing *on slum sites*. Can it afford this kind of housing not only in terms of site costs, but in terms of the costs and difficulties of relocation? Because, in Chicago as well as in the majority of northern cities, public housing sites are occupied by large numbers of families ineligible for public housing, is a reduction in housing supply *now* for the substantial numbers of ineligible families too high a price to pay for an increased supply of housing for the low-income families?

2. *Financial assistance*.—The “reasonable” allowances outlined in the federal policy statement have, in many cases, been inadequate for facilitating movement from a site. Incentive payments for moving from the site are not allowed under the federally-aided program. In other local programs and under special circumstances they have expedited relocation considerably.

It has been argued that even when financial payments are allowed, the local administrations, in an attempt to economize, have hesitated to use them in volume and, further, that it has yet to be proven that the lack of financial assistance has hindered relocation. On the other hand, when moving a family without providing financial assistance results in the family being forced to make expenditures beyond its means, clearly a burden is placed on the family not envisioned by the relocation process. It is unfair and contrary to the doctrine of public responsibility to place a family in a less favorable position after removal from the site. Quite aside from these considerations of consistency and justice is the obvious fact that if a family does not have the wherewithal to move at the precise time desired, relocation is delayed.

3. *Rehousing requirements*.—The rehousing requirements of the federal agencies demand that new accommodations found with the assistance of the local agency be “within the reach” of relocatees. Although the requirement is that the new quarters be within the financial means of site residents, even though in excess of the rent previously paid, difficulties do arise and delays in relocation may result. In the private housing market in a locality such as Chicago, it is often very difficult to secure new standard quarters comparable in price to the

slum dwelling units on the project site. No ready answers can be provided here. The necessity for additional inquiry is apparent.

4. *Responsibility*.—Although local agencies have generally agreed that families to be displaced are entitled to adequate notice of their impending removal, disagreement exists as to how far this notice should go in indicating their rights under the housing and redevelopment laws and the services provided to help them relocate. In so far as the notice emphasizes the public agency's obligation to help in rehousing, the pressure on the family to exert its own initiative in finding a new house is undermined. It may well be here that although a legal and moral problem may exist, it is an academic one for the relocater in a period of short housing supply.

5. *Administration*.—Although it is generally agreed that some form of co-ordinated effort in relocation must be made in every sizable urban center, no agreement exists as to the best mechanism for securing this co-ordination. A centralized relocation service, although the apparent answer, raises certain serious questions. It will keep in some kind of step the relocation activities occasioned by different redevelopment undertakings but may correspondingly weaken the co-ordination required among site clearance, demolition, and management within each major program.

Further, how should basic policy decisions—notably those as to the rates at which various programs may go ahead without making relocation impossible—be made? Conceivably this could be done through the creation of a policy board composed of either legislators and public members designated by the mayor, representatives of the operating agencies themselves, or a combination of both. Each organizational form raises its own problems. In any case, the distinctions between consultative duties and power to act would require nice definition and clear understanding. An advisory board undoubtedly would soon find itself in the midst of immediate conflicts over agency operating decisions. A board with assigned power might soon find itself unable to make many decisions without constantly seeking to expand its powers in order to do the job successfully.

In the light of the experience on this issue, however, a city-wide relocation service appears to be in a better position to deal with the various problems that arise in connection with relocation. A policy board would allow all agencies and departments concerned a voice in the formulation of policies and procedures as well as in the control of relocation operations, including the setting of priorities and rates of progress. The uncertainties facing all construction programs due to the present international situation and the resulting defense requirements

make even more necessary some form of efficient and flexible service readily adaptable to changing conditions.⁵

SOME BASIC IMPLICATIONS OF RELOCATION

Relocation has expanded the scope of inquiry of administrators and others concerned with the rebuilding of our cities, and has confronted them with the hard facts of community life—social reorganization and disorganization, the political, economic, and social pressures that are on every hand in city life. It is no longer true that the city planner can simply make “bold plans,” which will then be compromised and implemented by “practical operators”—both public and private. In large measure, relocation has forced an extension of our horizons to include the human being in the equation—not simply in a conception of things as they might be, but in terms of the realities of bringing about changes in a community of human beings, institutions, politicians, businessmen and others who, for a variety of reasons, resist most forms of change. It does no service to speak of relocation as simply the process of moving a site resident to make way for a development that will benefit the city and, in the long run, benefit him.

Relocation has become the symbol of inadequacy and frustration. Relocation has meant the uprooting of families, enforced homelessness, sacrifice of neighborhood values, threats to sources of political power, and equally important, the superimposing of a way of life quite often inconsistent with the very objectives the plan is intended to serve. Certainly the administrator and technician in a relocation office can do little to change such a climate of resistance and distrust.

Granting that relocation symbolizes resistance to the disruption of a way of life and a threat to the power of the dominant forces at work in a given community—church, political elements, etc.—it is noteworthy that no successful steps have been undertaken to relate recommended redevelopment projects, with their attendant relocation problems, to an over-all plan for the city—a plan that in concept would take into account the varied neighborhood and community requirements and in application would take realistic cognizance of the institutional and political pressures. Ideally much of the stimulus for redevelopment should come from the communities, from their political spokesmen, and as part of a program of clearance and conservation. Relocation would then begin to take its place as only one of the many problems that must be dealt with in the redevelopment process. In this fashion, relocation as the focus of opposition to redevelopment, as the symbol

5. *Ibid.*

of the public agencies' lack of regard for private and individual interests would begin to fade.

Only then does it become really useful to discuss relocation in administrative terms, to explore the administrative devices that lend themselves best to local conditions and particular situations. Thus, although the administrative and policy determinations of specialists in relocation deserve study and discussion, they become valid and useful only when relocation assumes the role of another ingredient in carrying through an over-all plan. It is of secondary importance to discuss the staff make-up of a relocation section, the forms to be utilized, the payments to be made, until planning has moved forward to a stage where these become simply devices to be utilized more efficiently in facilitating relocation, rather than as solutions to fundamental weaknesses that go back to the basic notions of what redevelopment should be and what it should accomplish.

In other words, this discussion points up that many of the problems attributable to relocation are actually problems arising out of precipitous and hit-or-miss redevelopment. Relocation becomes the whipping boy for the failures of redevelopment because relocation often is the first point of real contact between redevelopment and the people and their felt interests. This suggests that success with relocation will depend in large measure on our progress in formulating city-wide plans and redevelopment plans that further various interests in all parts of the city, have widespread public acceptance, and are far-reaching in their scope.

It is true, of course, that in the final analysis any relocation plan is dependent on an available supply of housing, both public and private. To recognize the fact that relocation must inevitably accelerate competition for an already inadequate supply of housing, particularly for housing at levels that the bulk of the relocatees can afford, and then to proceed with the relocation of families without providing for meeting this need is to fly in the face of reason and reality. This becomes doubly serious when Negroes are being relocated, since the competition for housing is most serious for the Negro and, further, a situation is created largely by public action that results in pressures upon the social fabric without an assumption of responsibility for coping with the effects of these pressures.

Whether relocation is looked upon as a continuing problem or as a by-product of the critical housing shortage, as an inevitable end product of nonwhite discrimination, as a useful device to curtail redevelopment, as a ticklish process calling for a degree of integration impossible of realization by the many public and private operating and staff agencies, as an educative process useful for facilitating off-site clearance,

or as an inherently effective instrument to be used intelligently with other tools in the rebuilding of our cities—these simple facts stemming from the Chicago experience are brought home in force: An efficient relocation operation, staffed by competent personnel, liberal as to financial allowances, and inherently sound in major detail is neither a substitute for nor an answer to (a) short-sighted and inadequate redevelopment, or (b) the political and social pressures that now so often obscure the prime task of planning for the long-term improvement of our cities.

Relocation has made tremendous strides. Success in the future lies essentially not with the relocater—but in the strengthening and acceptance of the community's over-all planning process.

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PART VI

**EMINENT DOMAIN IN ACQUIRING SUBDIVISION AND
OPEN LAND IN REDEVELOPMENT PROGRAMS: A
QUESTION OF PUBLIC USE**

**BY
IRA S. ROBBINS
AND
MARIAN PERRY YANKAUER**

EDITOR'S FOREWORD

AMONG the most progressive provisions in Title I of the Housing Act of 1949 are those that authorize federal aid to local agencies that may undertake to acquire and prepare for predominantly residential development what are commonly called dead or arrested subdivisions as well as "open land necessary for sound community growth. . . ." These parts of the federal statute should encourage local agencies to make redevelopment plans of considerable scope and flexibility. They could be particularly valuable in times of acute housing shortages. They should help to counteract the tendency, in these as well as in other times, to redevelop blighted built-up areas at unduly high densities.

To be sure, in taking advantage of these provisions local agencies will encounter obstacles both existing and prospective: (1) First among these is the widespread conception of redevelopment as simply the process of replacing obsolete, deteriorated buildings with new ones. Today this view is held by some but by no means all redevelopment officials. Quite probably it is less widely subscribed to now than it has been in the past. (2) Also, in many communities the popular expectation is that redevelopment will take place only in centrally located blighted districts. (3) Again, one interpretation of the legislative history of the federal Act makes projects in subdivision or open land areas entirely subsidiary to clearing and rebuilding built-up districts. (4) Finally, both local and federal officials must face the question of whether the courts are likely to hold that acquiring land in dead subdivisions and open areas as a part of local redevelopment programs is for a public use.

Without in any way underestimating or belittling the first three of these difficulties, it did seem to the Urban Redevelopment Study that the question of public use or public purpose deserved exploration and analysis at this time. Having reached this decision, we were fortunate to be able to secure for this part of our work the services of Ira S. Robbins, Esq., of the New York bar and executive vice-president of the Citizens' Housing and Planning Council of New York and Mrs. Marian Perry Yankauer, also of the New York bar. "Eminent Domain

in *Acquiring Subdivision and Open Land in Redevelopment Programs: A Question of Public Use*" is the result of their analysis of this issue. In the latter stages of their work, they had the valuable assistance of Mrs. Constance S. Lindau of the New York bar and Mrs. Shirley Adelson Siegel, a member of the California and New York bars. Mrs. Lindau worked on the revision of chapter i and Mrs. Siegel largely on chapter ii.

As the Table of Contents indicates, the work of Mr. Robbins and his associates was divided into two major parts.

In the first they have traced the evolving concept of public use in the decisions of high courts with particular attention to housing and other forms of urban land use. Both because of their legal training and because this section of the monograph should be particularly valuable to legal counsel for redevelopment agencies, it is in the form of a legal brief. Some references are made, however, to cases and lines of argument that are not in accord with the main trend of the decisions toward a wider and more flexible definition of public use. Also I am sure this section contains both information and lines of analysis that will prove useful to redevelopment officials and students other than those with legal training.

The second part points up those kinds of economic and other social facts that, in light of their preceding analysis, it is reasonable to expect that the courts would wish to consider when they will be asked to pass upon this question. From this latter section, it is clear that the amount of concrete, pertinent data that might be cited in briefs in the inevitable test cases is not great. Consequently Mr. Robbins, in addition to compiling and quoting from the more useful general and local studies now available, has also indicated various types of facts that might be collected and analyzed by such local agencies as planning commissions, housing and redevelopment authorities, local university and other research groups.

C. W.

CHAPTER I

MEMORANDUM OF LAW

STATEMENT OF THE PROBLEM

THE Housing Act of 1949 provides federal aid to municipalities for the redevelopment of blighted areas and for the development of open land for sound community growth.

Specifically, a project for which federal aid is available may include the acquisition of slum areas, deteriorating areas, whether residential or not, or

. . . land which is predominantly open and which because of obsolete platting, diversity of ownership, deterioration of structures or of site improvements, or otherwise substantially impairs or arrests the sound growth of the community and which is to be developed for predominantly residential uses, or (iv) open land necessary for sound community growth which is to be developed for predominantly residential uses . . . [Section 110(c) (iii)].

It is contemplated that the open land to be so taken will be used for public buildings, public housing, parks, etc., or will be sold to private developers to be developed in accordance with a plan considered necessary for sound community growth by the local development authority, the planning body, or the local legislative body. Any one project may include both private and public development.

In pursuance of the redevelopment plan for a city, open land may be taken for a project by a public agency authorized to undertake redevelopment. The open land may be included in a larger area that is deteriorated, so that the total project will include both open and blighted land, or it may be taken by itself, without including any blighted land, so that the total project will include only the development of a new area. Similarly, premature subdivisions now "dead" or arrested which contain the elements of blight described in the statute may be acquired by condemnation for the same purposes. Although local agencies in most states do not have power to undertake acquisition of these open areas, enabling legislation quite probably will be enacted soon in many states. In one state where such enabling legislation has been enacted, the provision for condemnation of vacant land

for development was objected to as a violation of state and federal constitutional protections of private property.¹

The Fifth Amendment to the United States Constitution limits the power of the federal government to exercise eminent domain as follows: ". . . nor shall private property be taken for public use without just compensation." State constitutions impose a similar restraint upon the state governments. More fully stated, the limitation is that private property may not be taken except for a public use and upon payment of just compensation. Condemnation by a state or its subdivision may also be challenged as a violation of the due process clause of the Fourteenth Amendment.

The specific problem which will be raised by these constitutional limitations will be to determine whether the exercise of the power of eminent domain is for a "public use." A public use has been defined in different periods of our history and different sections of our country as "a use by the public" and "a use beneficial to the public."² In some jurisdictions both definitions appear in court opinions.

PROPOSITION

The condemnation of vacant land, whether platted or open, by a municipality or other local agency, and its resale to private developers for development in accordance with a plan for sound community growth approved by the development authority, planning commission, or local legislative body is a taking for a public use, consistent with the various state constitutional limitations and with the Fourteenth Amendment to the United States Constitution.³

SUMMARY OF ARGUMENT

I. Under the various state constitutional limitations upon the sovereign power, states and their subdivisions may, upon payment of

1. *Opinion to the Governor*, 69 A (2d) 531 (Nov. 14, 1949). In an advisory opinion, the Rhode Island Supreme Court limited condemnation under its redevelopment statute to blighted improved land. For further discussion of the advisory opinion, see footnotes 17 (page 470) and 44 (page 485).

2. 18 Am. Jur. p. 660, et seq.; John Lewis, *Eminent Domain* (3d ed., Chicago: Callaghan & Co., 1909) Sec. 257; Philip Nichols, *Eminent Domain* (2d ed., Albany, N.Y.: Matthew Bender & Co., Inc., 1917) Sec. 40; Robert E. Cushman, *Excess Condemnation* (New York and London: D. Appleton & Co., 1917), chap. 7; Thomas M. Cooley, *Constitutional Limitations* (8th ed., Boston: Little, Brown & Co., 1927), pp. 1124 ff.

3. In cases where the taking of vacant land is part of a program involving the redevelopment of a substandard area, counsel may limit the basic proposition to the precise issue in the case. Some of the objections to the broad proposition stated above may thus be avoided. The quotation of additional excerpts from the Housing Act of 1949 should be considered.

just compensation, take private land to provide for the public welfare and to secure public benefit.

A). The requirement that land taken by eminent domain be devoted to use by the public generally as of right and on an equal footing is a restraint of the power upon private donees only, and is not applicable to states and their subdivisions.

B). The decisions of state courts upholding eminent domain for public housing and urban redevelopment have established that the government and its subdivisions may take land for the purpose of improving living conditions and eliminating or preventing blight.

II. The doctrine that benefit to the public is sufficient to support the use of eminent domain is firmly established in the federal courts. The Supreme Court will not condemn as a violation of the Fourteenth Amendment a taking upheld by a state court as a taking for a public use in conformity with its laws.

POINT I. UNDER THE VARIOUS STATE CONSTITUTIONAL LIMITATIONS UPON THE SOVEREIGN POWER OF EMINENT DOMAIN, STATES AND THEIR SUBDIVISIONS MAY, UPON PAYMENT OF JUST COMPENSATION, TAKE PRIVATE LAND TO PROVIDE FOR THE PUBLIC WELFARE AND TO SECURE PUBLIC BENEFIT

A. THE REQUIREMENT THAT LAND TAKEN BY EMINENT DOMAIN BE DEVOTED TO USE BY THE PUBLIC GENERALLY AS OF RIGHT AND UPON AN EQUAL FOOTING, IS A RESTRAINT OF THE POWER UPON PRIVATE DONEES ONLY AND IS NOT APPLICABLE TO STATES AND THEIR SUBDIVISIONS

The power of eminent domain is inherent in sovereignty⁴ and in its early history in the United States was considered to be limited only by a "higher law" which restricted its use to cases of public necessity.⁵ It is described by Cooley, in his *Treatise on Constitutional Limitations*, as follows:

More accurately, it is the rightful authority which exists in every sovereignty, to control and regulate those rights of a public nature which pertain to its citizens in common, and to appropriate and control individual property for the public benefit as the public safety, necessity, convenience, or welfare may demand [8th ed., 1927, p. 1110].

Until the middle of the nineteenth century its use by private corporations and persons for the purpose of developing the industrial and nat-

4. Cooley, *op. cit.*, *Constitutional Limitations*, p. 1110 and footnote.

5. Grant, "The Higher Law Background of Eminent Domain," 6 *Wisconsin Law Rev.* 67 (1931); II *Selected Essays on Constitutional Law* 912 (1938); P. Nichols, Jr., "The Meaning of Public Use in the Law of Eminent Domain," 20 *Boston University Law Rev.* 615, 616.

ural resources of the states was generally regarded as proper. In many western states this doctrine was never abandoned.

Under this broad doctrine the railroads expanded rapidly across the continent wielding the sovereign power of eminent domain to acquire rights of way; private companies secured spur tracks, storage facilities,⁶ tramways and aerialways for mining;⁷ and private firms built mill dams and obtained flowage rights⁸ and acreage—all through the use of eminent domain.

A similar theory allowed municipal tax funds to be expended to aid railroads⁹ and to persuade private industry to locate in a town until the United States Supreme Court in *Loan Association v. Topeka* 87 U.S. 655, 20 Wall, 655 (1874), held that a city was without power so to expend tax funds. The opinion there contains a stinging attack upon the policy under which municipalities had bankrupted their treasuries for the benefit of private industry.

Typical opinions supporting the broad grant of power to private donees stressed the individuality of the community—its necessities and its "local" demands.¹⁰ The need to use eminent domain to meet the demands of different localities was described by the United States Supreme Court in 1906 as follows:

[T]here might be exceptional times and places in which the very foundations of public welfare could not be laid without requiring concessions from individuals to each other upon due compensation which under other circumstances would be left wholly to voluntary consent [*Strickley v. Highland Boy Mining Co.* 200 U.S. 527, 531].

1. *The growth of the doctrine of "use by the public."*—The extent to which new industries interpreted their needs as synonymous with public benefit, and the ease with which state legislatures conferred the power of eminent domain upon private corporations in the early part of the nineteenth century brought an inevitable reaction.¹¹ The courts asserted their power to determine whether or not a use was really

6. *Ryan v. L. & H. Terminal Co.*, 102 Tenn. 111, 50 S. W. 744 (1899); *Cloth v. Chicago, R. I. & P.*, 97 Ark. 86 (1910), 132 S. W. 1005.

7. After the growth of the restrictive doctrine of use by the public, mining and irrigation were specifically declared to be public uses by constitutions in a few western states. P. Nichols, Jr., *op. cit.*, p. 623 footnote 48. See Nichols, *op. cit.*, I, 122 ff., for list of state constitution provisions.

8. See *Head v. Amoskeag Manufacturing Co.*, 113 U.S. 9. (1885) and cases cited therein. The court here avoids discussing condemnation in regard to the flooding of another's land by building a mill dam, and upholds the statute authorizing such actions as a regulation of the use of water power of running streams.

9. *Perry v. Keene*, 56 N.H. 514 (1876).

10. *Tanner v. Treasury Mining Co.*, 35 Colo. 593, 83 P. 464 (1906); *Ryan v. L. & N. Terminal*, 102 Tenn. 111, 50 S. W. 744 (1898); Annotation, 1 L.R.A. (N. S.) 970.

11. P. Nichols, Jr., *op. cit.*, p. 618; Cushman, *op. cit.*, chap. 7; "The Public Use Limitation on Eminent Domain: An Advance Requiem," 58 *Yale L. J.* 575.

"public," although conceding to the legislature the power to determine the necessity to delegate the power of eminent domain and the necessity for the taking, if the use were found to be public.

An examination of the cases applying the earlier broad doctrine of public benefit makes clear the overreaching by private interests which was encouraged. Thus in 1867 a concurring opinion upholding the Connecticut Flowage Act which permitted condemnation by mill owners described the scope of the power of private corporations to take for the public "benefit" in these terms:

The legislature may lawfully grant rights of easement to individuals or corporations to enable them to erect and operate structures, if the result of their operation is the production of an article or thing intended to be furnished or sold to the public for a beneficial use, and to supply their reasonable needs [*Todd v. Austin*, 34 Conn. 78, 90].

In putting a brake upon such promotion of private industry at the expense of private land ownership, the courts were acting in situations that bore no relation to the inherent powers of the sovereign to take for the welfare of all its citizens. Yet that fact has sometimes been overlooked. Thus, the Supreme Court of Tennessee, in a decision frequently cited as adopting the "use by the public" test, actually had before it an outrageous attempt of one mining company to condemn the private railroad of a competitor in order to secure easier access to a mainline railroad. See *Alfred Phosphate Co. v. Duck River Phosphate Co.*, 120 Tenn. 260, 113 S.W. 410 (1907).¹²

Similarly the Kansas Supreme Court, passing upon an attempt of a private mill to condemn for its use, renounced the broad powers granted in an earlier period, saying:

To a limited extent every honest industry adds to the general sum of prosperity and promotes the public welfare. This is not enough; a business which may invoke the right of eminent domain must be one in which the public has an exceptional and peculiar interest [*Howard Mills v. Schwartz*, 77 Kan. 599, 609 (1908), 95 P 559, 18 L.R.A. (N. S.) 356].

Faced with such an exploitation of the power of condemnation by private interests, the courts of many states adopted, during the period from 1850 to 1910, a test of public use described as the "use by the

12. See also *Adam Scholl v. German Coal*, 118 Ill. 427 (1888), 28 NE 748, where a similar attempt to take for private access to a railroad was found not to be a "public use," and *Evergreen Cemetery Association v. Beecher*, 53 Conn. 551 (1885), 5 A 353, where court would not support eminent domain for a private cemetery (cited in the dissent in *Conn. College for Women v. Calvert*, 87 Conn. 421, 88 A 633 (1913), as a case where public benefit was not served, while the majority opinion cited it as a "use by the public" test.)

public" test.¹³ In contrast to the doctrine that public use was satisfied by public benefit or advantage, the new doctrine made the test of public use public "employment" of the land taken.¹⁴ In actual operation the limitation was satisfied if the public had the right to go upon the land upon an equal footing, as in the case of a railroad, or if those using the land were under some requirement to furnish services to the public generally, as in the case of a public utility.¹⁵ Lewis stated the rule as requiring "that to be a public use the property must be taken into the direct control of the public or of some public agency, or the public must have the right to use in some way the property taken."¹⁶ The purpose of the restraint is to prevent abuse of the power of eminent domain for the private benefit of individuals. It is obvious that it is not a limitation upon the power of the public or public agencies to take property directly where the purpose of the taking is not to secure private benefit, but to promote public welfare.

2. *The courts have recognized the distinction between the powers of public and private agencies to condemn.*—During the period when the doctrine of "use by the public" was developing, governmental exercise of eminent domain was confined, with rare exceptions, to highways, public buildings and the like, giving rise to little litigation and never being tested against the restrictions of "use by the public."¹⁷ The exceptions are the drainage and levee cases, discussed below, and a series of Massachusetts cases where condemnation of low-lying, waterfront land for reclamation and resale was upheld.¹⁸

13. P. Nichols, Jr., *op. cit.* See also McDougal and Mueller, "Public Purposes in Public Housing," 52 *Yale L. J.* 42, for a discussion of the similar development in the law of taxation and public spending. Courts are not always clear in dealing with limitations upon eminent domain, whether or not the same principles apply as in cases dealing with "public purposes" for taxation cases. Earlier decisions frequently applied limitations adopted in public spending cases to eminent domain problems. Thus, the decision of the Massachusetts Supreme Court in *Lowell v. Boston*, 111 Mass. 454 (1873), denying to the city the right to raise money to lend to private individuals to help them rebuild their property in a large section of Boston which had been burned, is cited frequently as a limitation upon the power of eminent domain. The *Opinion of the Justices*, 234 Mass. 597, 127 N.E. 525, (1920), was that "Legitimate expenditures of public funds and the exercise of eminent domain cover broader fields than does the police power." As is discussed below in point B (pp. 478 ff.), later cases hold that the power of eminent domain may be used coextensively with the police power.

14. 18 Am. Jur. 660 and footnote 17 thereto.

15. *Wisconsin River Imp. Co. v. Pier*, 137 Wis. 325, (1908), 118 N.W. 875; *Fallsburg v. Alexandria*, 101 Va. 68 (1903) 43 S.E. 194.

16. Lewis, *op. cit.*, pp. 504-5.

17. Some states, of which Rhode Island is one, have never abandoned the "use by the public" doctrine. That interpretation of the doctrine strongly influenced the two justices of the Supreme Court of Rhode Island who, in their advisory opinion to the governor, held the redevelopment act unconstitutional. See footnote 1, *supra*.

18. *Dingley v. Boston*, 100 Mass. 544 (1868); *Moore v. Sanford*, 151 Mass. 285 (1890), 24 N.E. 323; *Sweet v. Rechel*, 159 U.S. 380 (1895).

In state after state the courts imposed the limitations of the narrow doctrine upon *private* persons and corporations until by 1910 it was well established. Without enunciating a rule, they distinguished between private condemnation and condemnation by public agencies. When a public body acted, a strong presumption arose that it was acting in the public interest; when private action was taken a like presumption did not arise and motives were carefully scrutinized.¹⁹ The actual results of the judicial interpretation of the limitation, with the exceptions and subtle avoidances that resulted from the attempt to apply an inflexible rule, have been described as "a massive body of case law, irreconcilable in its inconsistency, confusing in its detail, and defiant of all attempts at classification."²⁰

In 1891 the Supreme Court of Pennsylvania refused to permit a private corporation to condemn land for a public market, finding the use to be a private one, but stated, significantly: "In a market established, managed and controlled by the municipal authorities and governed by municipal laws, there may be, no doubt, a public use" (*Twelfth Street Market Co. v. Philadelphia and Reading Terminal*, 142 Pa. 584, 589, 21 A. 989).

In one of the most frequently cited opinions on governmental power to condemn, the Pennsylvania Supreme Court upheld condemnation for public housing purposes, saying:

Furthermore, a stronger presumption arises in favor of the public nature of the use where the taking is by the government itself instead of by a private corporation endowed with the power of eminent domain [*Dornan v. Philadelphia Housing Authority*, 331 Pa. 209, 222, 200 A 834 (1938)].

In 1945 the Supreme Court of Minnesota, upholding the right of condemnation of the highway commissioner, specifically held that the statute granting power to condemn could not be strictly construed where the state is acting in its sovereign capacity (*Burnquist v. Cook*, 220 Minn. 48, 19, N.W. 2d 394 [1945]).

In *City of Knoxville v. Heth*, 186 Tenn. 321, 210 S.W. 2d 326

19. See cases cited in 18 Am. Jur. 660, footnote 19, which deal exclusively with private donees of the power. *Conn. College for Women v. Calvert*, 87 Conn. 421, 88 A 633, (1913)—where private school was not permitted to condemn land because its facilities were not open to all. *State ex rel. Harris v. Superior Court*, 42 Wash. 660, 85 P 666, (1906)—privately owned electric power company furnishing power to manufacturing establishments not a public use. *Water Power Cases*, 148 Wis. 124, 134 N.W. 330 (1912). *Boyd v. C. L. Ritter Lumber Co.*, 119 Va. 348, 89 S.E. 273 (1916)—where the court applied the narrow test "where the property to be condemned is to come under the control of private persons or corporations." *Fountain Park v. Hensler*, 199 Ind. 95, 155 N.E. 465 (1927)—where the court refused to permit a Chattauqua Society to condemn for its use, because the enterprise lacked "a definite and fixed" public use; the court also took into consideration "what degree of public good or utility is necessary."

20. 58 *Yale L. J.* 606; see also P. Nichols, Jr., *op. cit.*; Nichols, *op. cit.*, p. 129.

(1948), the Supreme Court of Tennessee, upholding condemnation by a publicly owned utility company stated: "Common sense and reason dictate to us that in matters of this kind a much broader latitude should be given a municipality, even in its proprietary functions, than is given a private corporation" (p. 329).

The court there relied upon Mr. Justice Holmes's distinction between the management of a private corporation whose incentive is private gain, and a public corporation where gain is prohibited (*Springfield Gas and Electric Co. v. Springfield*, 257 U.S. 66 [1921]).

Judicial pronouncement, decisions, and the definitions of text writers all support the principle that the government may take land for a public use without being subjected to the limitations of the "use by the public" test, wherever

. . . the government is supplying its own needs, or is furnishing facilities for its citizens in regard to those matters of public necessity, convenience or welfare, which, on account of their peculiar character, and the difficulty—perhaps impossibility—of making provision for them otherwise, it is alike proper, useful and needful for the government to provide [*Cooley, op. cit.*, p. 1131].

3. *The increased use of eminent domain by government prior to the public housing program.*—As the responsibility assumed by government for the general welfare of its citizens broadened, corresponding to the increase in the permitted scope of the police power, public agencies exercised more often the power of eminent domain to accomplish their purposes.

We have noted briefly the drainage and reclamation cases, which, when examined in more detail, throw much light upon the broad powers which the courts recognized as proper for the sovereign even in the nineteenth century and the opening years of the twentieth century.²¹

21. For cases generally supporting power to drain land for both public health and reclamation purposes, see *Lewis, op. cit.*, p. 569, sec. 286; 19 C.J. 607, 608, and 28 C.J.S. 232, 233. At 19 C.J. 610, it is stated that in the "better considered cases," public health is only one of the proper objects for drainage, and reclamation is a valid purpose. *In re Trempealeau Drainage District*, 146 Wis. 398, 131 N.W. 838 (1911), approving drainage of a district where "it is manifest that the proposed scheme would drain off the waters collecting therein, thus producing a large area of dry and tillable land and a consequent destruction of insanitary conditions inimicable to the public health." *Little River Drainage District v. St. Louis and San Francisco R.R. Co.*, 236 Mo. 94, 139 S.W. 330 (1911) stating that since police power can be used for health of swamp residents, "it may also be invoked to make such lands fit for use, productive and habitable," p. 111. To same effect: *Bemis v. Guirl Drainage*, 182 Ind. 36, 105 N.E. 496 (1914); *State v. Board of Com. Polk Co.* 87 Minn. 325, 92 N.W. 216 (1902). For language as to extent of power, see: *Wilton v. St. John Co.*, 123 So. 527, 98 Fla. 26 (1929); *Almond v. Bd. of Drainage Com.*, 147 Ga. 532, 94 S.E. 1028 (1917); *Almond v. Pate*, 143 Ga. 711, 85 S.E. 909 (1918); *Heick v. Voight*, 110 Ind. 279, 11 N.E. 306 (1886); *Carter v. Griffith*, 200 S.W. 369 (Ky. 1919); *New Orleans Land Co. v. Bd. of Com. of Orleans Levee Dist.*, 132 So. 121, 171 La. 718, aff'd. 283 U.S. 809 (1931); *Shelton v. White*, 163 N.C. 72, 79 S.E. 427 (1913).

Under generally similar state statutes, drainage districts were established with power in commissioners to drain private land upon application of a number of land owners. For such purposes they might condemn land for a ditch through private property. The statutes uniformly relied upon public health, convenience, and welfare, and usually included the purpose of making the land available for use.

The propriety of the use of eminent domain by the government for the purpose of reclaiming land so that it might be put to a beneficial use was established in a leading New Jersey drainage case.

This large district is now comparatively useless. In its present condition it impairs very materially the benefits which naturally belong to the adjacency of the territory to its navigable waters. It is difficult from the great expanse of such works to build roads across it, and consequently it has heretofore interposed a barrier to anything like easy access from one town to another. . . . To remove these evils and to make this vast region fit for habitation and use, seems to me plainly within the legitimate province of the legislature; and to effect such ends, I see no reason to doubt that both the prerogatives of taxation and of eminent domain may be resorted to [*Tide-water Co. v. Coster*, 18 N.J. Eq. 518, 521 (1866)].

These statutes were upheld even in states which had announced the "use by the public" concept. In a Georgia decision, the court, after discussing the views expressed in other jurisdictions, many of which were based on the theory that the statutes rested upon the power of eminent domain, founded its approval of the statute upon the police power, and considered the use of eminent domain as merely incidental to the proper exercise of the police power (*Almond v. Bd. of Drainage Commissioners*, *supra*, n. 21), a theory which later was revived in the public housing decisions.

Although the courts of Massachusetts may have been reluctant to recognize in the sovereign as broad a power to promote public welfare as were some of her sister states,²² nevertheless as early as 1866, in a case cited with approval in recent years by the United States Supreme Court and by the Massachusetts Supreme Court, Massachusetts upheld the right of a town to condemn land wholly enclosed in private property for passage to a scenic place, stating that

there may be some reason to expect that a way furnishing access to "pleasing natural scenery" will lead to settlement and habitation, and that, in the plan of a town, it may be well to make some prospective provision for probable future wants of the inhabitants in this respect [*Higginson v. Nahant*, 93 Mass. 530, 536 (Cited with approval, *Opinion of the Justices*, 234 Mass. 597 (1920), and *Rindge Co. v. L. A. County*, 262 U.S. 700 (1923)].

22. *Lowell v. Boston*, *supra*. In 1912 the court's ruling that the state lacked power to secure land for resettlement of laboring families in less congested areas (*Opinion of the Justices*, 211 Mass. 624, 98 N.E. 611) resulted in the adoption of a constitutional amendment specifically authorizing such action.

In 1868 in *Dingley v. Boston*, 100 Mass. 544, the Massachusetts court upheld a statute that authorized the city of Boston to use eminent domain (incidentally, by what would today be called a "quick-taking" procedure) in acquiring insanitary flats in what was known as the Church Street District, to raise the level of the land substantially, if necessary, to replat the area, to sell the improved land back to its owners or to others. The plaintiff was owner of a lot that the city decided to use for a fire station. He contended, *inter alia*, that even if the purpose of the statute were valid, the city had no right to acquire a fee in the land by eminent domain, but could only acquire a lesser estate for the period of time required to raise and otherwise to improve the area. After considering this contention at some length the court concluded:

On the whole, therefore, the plan of compelling the city to take the land in fee simple, and the owner to part with his whole title for a just compensation, would seem to be the most simple and equitable that could be adopted; unless there is some objection on the ground that a fee simple is more sacred than an estate for life or years, or than an easement of greater or less duration. We can see no ground for regarding one of these titles as more sacred than another . . . [p. 559].

In 1890, the Massachusetts court again permitted governmental condemnation, allowing Boston to acquire certain flats in South Boston, to fill them in and resell them at a profit for harbor and railroad terminal facilities, basing its decision to a large extent on the fact that this project will "tend to the prosperity and welfare of large portions of the community" (*Moore v. Sanford*, 151 Mass. 285, 24 N.E. 323 [1890]).

Condemnation for levees and other forms of flood control resulting in a benefit to land other than that taken by eminent domain was found to be within the power of the state to provide for the health, safety, and welfare of its residents.²³

The cases thus far discussed emphasize the historical development and increase in use by government of eminent domain, though of them only *Dingley v. Boston* and *Moore v. Sanford* involved a situation in which the property acquired was to go out of the direct control of a public agency; and in the latter the railroads might well have succeeded in condemning the property themselves.

A quite different situation, and one not far removed from situations which may arise under urban development and redevelopment legislation, was presented in the State of Washington where the supreme court upheld a statute providing for the acquisition of vacant land by

23. *Putnam v. City of Salina*, 17 P (2d) 827 (1933), 33 Kan. 637. *Board of Black River Regulating District v. Ogsbury*, 196 N.Y.S. 281, 203 App. Div. 43, aff'd., 235 N.Y. 600 (1923).

the Reclamation Board, for the subdivision and development of the land as farms, and for its resale to persons who would agree to farm the land and live on it. After reviewing the history of the interpretation of the public use limitation, the court pointed out that "new public necessities are weighty considerations in determining the question of public use," with the added *caveat* that strict adherence to past customs leads to stagnation.²⁴

The increased use of the power of condemnation by governmental agencies as illustrated in these cases was but one indication of the increasing recognition that changing times had vastly increased the need for government intervention to promote the general welfare. Another indication was the increased and novel use of the police power and the recognition by courts that the scope of the state's police power is sufficiently broad to permit government action which at an earlier date would not have been countenanced. Recognition of the increased scope of the police power was particularly necessary in order that our rapidly expanding cities might meet the problems which confronted them. A striking example of the permissible exercise of the police power, despite its interference with private property rights, is afforded by the innumerable zoning laws which were first introduced at the turn of the century and which were upheld by the courts. Some few of these were drafted as a combination of the police power and the power of eminent domain, providing damages for the restrictions upon the absolute freedom of property owners. These ordinances, based in part on condemnation, were tested against the limits of the use by the public test, and were upheld in each instance upon a finding of public benefit.²⁵ An opinion of unusual clarity and insight into the problems faced by municipalities arose from such a test. In 1920 the Supreme Court of Minnesota, in *State ex rel. Twin Cities Building and Investment Co. v. Houghton*, 144 Minn. 1, 176 N.W. 159, reviewed the purposes of the zoning ordinance and stated:

That the public gets no physical use of the premises is clear. It cannot travel upon or occupy them. The use acquired so far as the general public is concerned is rather negative in character, except, perhaps, that its sense of the appropriate and harmonious will not be offended by the erection in the condemned district of prescribed buildings [p. 15].

The notion of what is a public use changes from time to time. Public use expands with the new needs created by the advance of civilization and the modern tendency of the people to crowd into large cities. Such a taking as here proposed could not possibly have been thought a taking for public use at the time of the adoption of our Constitution when the state was practically a wilderness without a single city

24. *State ex rel. State Reclamation Board v. Clausen*, 188 P 538 (1930), 110 Wash. 525.

25. *Attorney General v. Williams*, 174 Mass. 476 (1899), 55 N.E. 77; *In re Kansas City Ordinance*, 298 Mo. 569, 252 S.W. 404, 28 A.L.R. 295 (1923).

worthy of the name. . . . What constitutes a public use at the time it is sought to exercise the power of eminent domain is the test [p. 16].

The tendency is in the direction of extending the power of restriction, either through the exercise of the police power or the exercise of the right of eminent domain, in aid of so-called city planning or the improvement of housing conditions [p. 17].

In upholding the public use there involved the court described it as an effort to achieve the end of proper planning of cities, elimination of congestion, resulting diminution of taxes and greater satisfaction with homes. All these, the court said, contribute to the general welfare.

At about the same time, the Connecticut Supreme Court upheld the power of a Town Planning Commission to restrict street layout in private subdivisions and to control building lines. The court there stated:

A town commission plan . . . is distinctly for the public welfare. . . . Such a plan is wise provision for the future. It betters the health and safety of the community; it betters the transport facilities; and it adds to the appearance and wholesomeness of the place, and as a consequence it reacts upon the morals and spiritual power of the people who live under such surroundings. . . . But unless some authority controls and regulates the development, the city will degenerate, become congested, develop community eyesores and yield to land speculation [*Windsor v. Whitney*, 95 Conn. 359, 363 (1920)].

In 1926, when the United States Supreme Court tested a police power zoning ordinance against the limitations of the Fourteenth Amendment, it based its opinion of the reasonableness of the ordinance upon the following considerations:

promotion of the health and security from injury of children and others by separating dwelling houses from territory devoted to trade and industry; suppression and prevention of disorder; facilitating the extinguishment of fires and the enforcement of street traffic regulations and other general welfare ordinances; aiding the health and safety of the community by excluding from residential areas the confusion and danger of fire, contagion and disorder which in greater or less degree attach to the location of stores, shops and factories [*Village of Euclid v. Ambler Realty*, 272 U.S. 359, 391].

Commenting upon the relation of zoning and eminent domain to the power of cities to provide for the general welfare, McQuillan, in his work on *Municipal Corporations*, states:

In the process of eminent domain it is true that the promotion of the public welfare is the single basis justifying the exertion of the power. Whether these terms may or may not be distinguished, taking or damaging property for a public purpose or use by eminent domain . . . requires compensation to the owner thereof, whereas authorized interference with the property rights under the police power, to advance the public welfare does not. Moreover, a distinction commonly recognized by the courts has been well stated in a Massachusetts case, where it is said that "legitimate expenditures of public money and exercise of eminent domain cover a broader field

than does the police power in its limitations upon the right of use of private property" [*Opinion of the Justices*, 234 Mass. 597, 603].²⁶

At approximately the same time that zoning ordinances made their appearance, unsuccessful attempts were made to use excess condemnation as a further aid in city planning and community development. One of the purposes to be served by excess condemnation was to conform an area adjoining a public improvement to the object of the improvement by imposing restrictions upon it. Other purposes were to recoup the cost of the improvement by resale of the land benefited, at the increased price; and to acquire small remnants of land left after the improvement was made, which pieces, because of size and shape, might otherwise become useless and blighted.²⁷

It was in reviewing the power of the sovereign to use eminent domain in this manner that the only decisions adversely applying the "use by the public" test to governmental condemnation appeared. Some of these decisions turned upon the unreasonableness of imposing restrictions through condemnation and resale, the courts finding it would have been more reasonable to subject the owners to the restrictions.²⁸ The decisions in those cases which dealt with the use of excess condemnation for the purpose of financing an improvement turned upon a finding that it was more equitable to finance the improvement by taxation than by excess condemnation.²⁹

There is reason to believe that some of these cases³⁰ might well have been decided the other way had the questions they posed been submitted to the courts some twenty-five or thirty years later, for the concept of public use on which the low-rent housing and reclamation cases were determined³¹ is sufficiently broad to support a holding that excess

26. Sec. 1600, p. 523 (2d ed., 1943).

27. Cushman, *op. cit.*, chap. 1.

28. *Opinion of Justices*, 204 Mass. 607, 91 N.E. 405 (1910), holding invalid a proposed taking by eminent domain for the purpose of assembling land along a proposed highway into large parcels for development as warehouses, commercial and industrial buildings, with easy access to the highway. *Pennsylvania Mutual Life v. Philadelphia*, 242 Pa. 47, 88 A 904 (1913), held invalid an attempt by the city to condemn land adjoining a new parkway, to impose restrictions which would conform its uses and resell the land.

In 1913 the Massachusetts Supreme Court again struck down an attempt to impose conforming uses upon adjoining land in *Salisbury Land & Improvement Co. v. Commonwealth*, 215 Mass. 371, 102 N.E. 619, finding unconstitutional the plan to develop part of an area taken by eminent domain as a public beach, while developing the balance as a resort for sale or lease to private persons, under restrictions conforming the uses to those of the public beach.

29. The decision of the Supreme Court in *City of Cincinnati v. Vester*, 281 U.S. 439 (1929), often cited as invalidating excess condemnation, did not touch upon the constitutional question, but found a failure to comply with the statute. See Anno. 14 A.L.R. 1350.

30. See cases cited in footnote 28.

31. See *Dorman v. Philadelphia Housing Authority*, 331 Pa. 209, 300 A 834 (1938). *Spahn v. Stewart*, 268 Ky. 97, 103 S.W. (2d) 651. *U.S. ex rel. T.V.A. v. Welch*, 327 U.S. 546 (1946).

condemnation is a proper means of insuring sound community development.

The adoption of constitutional amendments providing for excess condemnation in a number of states eliminated the problem.³²

With the exception of the excess condemnation cases, the power of eminent domain to provide for the public welfare continued to expand as the concept of public welfare expanded.

B. THE DECISIONS OF STATE COURTS UPHOLDING EMINENT DOMAIN FOR PUBLIC HOUSING AND URBAN REDEVELOPMENT HAVE ESTABLISHED THAT THE GOVERNMENT AND ITS SUBDIVISIONS MAY TAKE LAND FOR THE PURPOSE OF IMPROVING LIVING CONDITIONS AND ELIMINATING OR PREVENTING BLIGHT

A small start was made by the Federal Public Works Administration between 1933 and 1935 in low-rent housing.³³ Shortly afterward the program of low-rent housing and slum clearance shifted to the states with the federal government giving financial aid only. Immediately the various state laws were attacked on many grounds, one being that they provided for an illegal expenditure of public funds for other than a public purpose and another being that such use of eminent domain was not for a public use. By 1940 these objections had been overruled in twenty-eight states.³⁴

32. 58 *Yale L.J.* 575; 46 *Col. L. Rev.* 108.

33. Although projects were completed by the federal government in several states without objection, a federal court held in 1935 that the federal government was without power to enter into the program. *U.S. v. Certain Lands in Louisville*, 78 Fed. (2d) 684 (1935).

34. Ala.—*Re Opinion of Justices* (1938) 235 Ala. 485, 179 So. 535; *Brammer v. H.A.* (1940) 239 Ala. 280, 195 So. 256.

Ariz.—*Humphrey v. Phoenix* (1940) 55 Ariz. 374, 102 P 2d 82.

Ark.—*Hogue v. H.A.* (1940) 201 Ark. 263, 144 S.W. 2d 49; *Denard v. H.A.* (1942) 203 Ark. 1050, 159 S.W. 2d 764; *Kerr v. East Cent. Ark. Reg. H.A.* (1945) 208 Ark. 625, 187 S.W. 2d 189.

Cal.—*Housing Auth. v. Dockweiler* (1939) 14 Cal. (2d) 437, 94 P (2d) 794.

Colo.—*People ex rel. Stokes v. Newton* (1940) 106 Colo. 61, 101 P (2d) 21.

Fla.—*Marvin v. H.A.* (1938) 133 Fla. 590, 183 So. 145; *Garrett v. N.W. Fla. Reg. H.A.* (1943) 152 Fla. 551, 12 So. 2d 448.

Ga.—*Williamson v. H.A.* (1938) 186 Ga. 673, 199 S.E. 43.

Ill.—*Krause v. Peoria H.A.* (1939) 370 Ill. 356, 19 N.E. 2d 193.

Ind.—*Edwards v. H.A.* (1939) 215 Ind. 330, 19 N.E. 2d 741.

Ky.—*Spahn v. Stewart* (1937) 268 Ky. 97, 103 S.W. 2d 651; *Webster v. Frankfort H.A.* (1943) 293 Ky. 114, 168 S.W. 2d 344.

La.—*State ex rel. Porterie v. H.A.* (1938) 190 La. 710, 182 So. 725.

Md.—*Matthaei v. H.A.* (1939) 177 Md. 506, 9 A 2d 835.

Mass.—*Stockus v. Boston H.A.* (1939) 304 Mass. 507, 24 N.E. 2d 333; *Allydonn Realty v. Holyoke H.A.* (1939) 304 Mass. 288, 23 N.E. 2d 665.

Mich.—*Re Brewster Street Housing Site* (1939) 291 Mich. 313, 289 N.W. 493.

Mo.—*Laret Investment Co. v. Deckman* (1939) 345 Mo. 449, 134 S.W. 2d 65.

Mont.—*Rutherford v. Great Falls* (1939) 107 Mont. 512, 86 P 2d 656.

Nebr.—*Lennox v. H.A.* (1940) 137 Neb. 582, 290 N.W. 451, 291 N.W. 100.

N.H.—*Re Opinion of Justices* (1947) 94 N.H. 515, 53 A 2d 194.

The rationale of these opinions in state after state is that the public benefit from the elimination of the slums is sufficient to justify either the acquisition of slum areas and the clearance of the areas or the acquisition of other land to provide housing for persons of low income in a decent, safe, and sanitary environment. In many jurisdictions the validity of the taking of vacant land for the purpose of rehousing persons displaced by slum clearance programs has been upheld as a necessary part of the original purpose of slum clearance. When the validity of the first taking is established, and the necessity for the second, most jurisdictions look no further.³⁵

In the first court decision dealing with these issues, the New York Court of Appeals in *Matter of N.Y. City Housing Authority v. Muller*, 270 N.Y. 333 (1936), upheld the power of the sovereign to condemn land for the purpose of clearing slums and providing decent, safe, and sanitary housing for persons of low income.³⁶ After reviewing the legislative findings of the great social evils of slums, the court pointed out that the state could attack these evils with any or all of the three powers available to it—taxation, police power, or condemnation. In words clearly applying the broad public benefit theory, the court stated:

It is also said that since the taking is to provide apartments to be rented to a class designated as "persons of low income" or to be leased or sold to limited dividend corporations, the use is private and not public. This objection disregards the primary purpose of the legislation. Use of a proposed structure, facility or service by everybody and anybody is one of the abandoned universal tests of a public use. [Citing cases.] But the essential purpose of the legislation is not to benefit that class or any class; it is to protect and safeguard the entire public from the menace of the slums [p. 342].

N.J.—*Romano v. H.A.* (1939) 123 N.J.L. 428, 10 A 2d 181, 124 N.J.L. 452; *Ryan v. H.A.* (1940) 125 N.J.L. 336, 15 A 2d 647.

N.Y.—*N.Y.C. H.A. v. Muller* (1936) 270 N.Y. 333, 1 N.E. 2d 153.

N.C.—*Wells v. H.A.* (1938) 213 N.C. 744, 197 S.E. 693.

Ohio—*State v. Sherrell*, 136 Ohio St. 328 (1940), 25 N.E. 2d 844.

Pa.—*Dornan v. Phil. H.A.* (1938) 331 Pa. 209, 200 A. 834.

S.C.—*McNulty v. Owens* (1938) 188 S.C. 377, 199 S.E. 425.

Tenn.—*Knoxville H.A. v. Knoxville* (1939) 174 Tenn. 76, 123 S.W. 2d 1085.

Texas—*H.A. v. Higginbotham* (1940) 135 Texas 158, 143 S.W. 2d 79.

Va.—*Mumpower v. H.A.* (1940) 176 Va. 426, 11 S.E. 2d 732.

W.Va.—*Chapman v. Huntington W.Va. H.A.* (1939) 121 W.Va. 319, 3 S.E. 2d 502.

35. *Reggin v. Dockweiler*, 15 Cal. (2d) 651, 104 Pac. 2d 367; *Cremer v. Peoria Housing Authority*, 399 Ill. 579, 78 N.E. 2d 276; *Douthitt v. City of Covington*, 144 S.W. 2d 1025; *Matthei v. Housing Authority*, 177 Md., 506; *Allydorn Realty v. Holyoke Housing Authority*, 304 Mass. 288; *Chapman v. Huntington, West Virginia Housing Authority*, 3 S.E. 2d 502.

36. The court had previously affirmed decisions upholding condemnation upon the ground of public benefit. *Board of Black River Regulating District v. Ogsbury*, 196 N.Y. 281, 203 App. Div. 43, aff'd. without opinion, 235 N.Y. 600 (1923) and *Oneonta Light & Power Co. v. Schwarzenback*, 150 N.Y. Supplement 76, 164 App. Div. 584, aff'd. 219 N.Y. 588 (1916).

In a matter of far reaching public concern, the public is seeking to take the defendant's property and to administer it as part of a project conceived and carried out in its own interest and for its own protection. This is a public benefit, and therefore, at least as far as this case is concerned, a public use [p. 343].

This decision was quickly followed in 1937 by a similar upholding of the Kentucky public housing law, finding that condemnation for slum clearance involves objects essential to public interest, since the land would be used to promote public health, safety, morals, and general welfare (*Spahn v. Stewart*, 268 Ky. 97, 103 S.W. [2d] 651).

The Supreme Court of Pennsylvania, which had in 1913 struck down the last attempt of the city of Philadelphia to condemn property for the general welfare,³⁷ in 1938 wrote the most comprehensive of the opinions of state courts and upheld the taking of land for slum clearance and housing for persons of low income.³⁸ The issue was clearly stated as follows: ". . . while conceding that the construction and renting of the new dwellings to such persons may constitute a public benefit, plaintiff maintains that their use will not be a public one" (331 Pa. 217).

Pointing out that Pennsylvania decisions have in various fact situations applied both the public benefit and the use by the public rules, the court stated that these decisions

. . . justify the conclusion that judicial interpretation of "public use" has not been circumscribed in our State by mere legalistic formulas or philological standards. On the contrary, definition has been left, as indeed it must be, to the varying circumstances and situations which arise, with special reference to the social and economic background of the period in which the particular problem presents itself for consideration. Moreover, views as to what constitutes a public use necessarily vary with changing conceptions of the scope and functions of government, so that today there are familiar examples of such use which formerly would not have been so considered. As governmental activities increase with the growing complexity and integration of society, the concept of "public use" naturally expands in proportion [p. 221].

To the assertion that the use of the property would be confined to those few who were tenants of the projects, the court replied that "an enterprise does not lose the character of a public use because that use may be limited by circumstances to a comparatively small part of the public" (p. 222), a position which had also been accepted under the narrow doctrine in many jurisdictions. The *Spahn* decision, *supra*, in Kentucky, had answered the same objection by stating that all persons are benefited by the increased general welfare and health.

Since the public has the power to clear the slums, the power to provide shelter elsewhere for those displaced from the slums was recog-

37. *Pennsylvania Mutual v. Philadelphia*, 242 Pa. 47, 88 A 904 (1913).

38. *Dornan v. Philadelphia Housing Authority*, 331 Pa. 209, 200 A 834 (1938).

nized in the *Dornan* case as a necessary concomitant in order to achieve the purpose of the legislation.

It appearing that all previous attempts to rid communities of their unsafe and objectionable dwellings have proved ineffective, it is now found necessary to resort to the more drastic and comprehensive method of demolishing such structures simultaneously and over more extended areas. But, as indicated in the Housing Authorities Law—and indeed it is self-evident—this cannot be done and the ultimate aim be achieved unless at the same time provision is made for sanitary and wholesome accommodations for those who will lose their homes in the process. Certainly, such persons cannot be left wholly without shelter, yet their financial resources are insufficient to enable them to lease any existing dwellings outside of other slum districts, since private industry has not been able to furnish acceptable accommodations at a rental cost as low as that now paid for rooms in slum properties. For the State or a municipality to tear down objectionable houses without providing better ones in their stead would be merely to force those ejected into other slums or compel them to create new ones, and the cardinal purpose of the legislation would thus be frustrated [p. 225].

This is an express declaration that the state may, by eminent domain, as well as by the police power, act *affirmatively* to prevent the creation of slums; act, that is, prospectively to secure the public welfare. Indeed there runs through the decisions upholding public housing a strong suggestion that there is no essential difference between the test of the power to condemn and the test of the proper use of the police power. The juncture of the police power and power of eminent domain is thus recognized and it is decided that eminent domain may be employed to attain ends justified by the police power.

What we have here, then, is a situation in which the proposed construction of new housing is vital to the clearance of the slums through the exercise of the police power, but the necessary sites for the housing projects can be justly and practically acquired only by means of the power of eminent domain, and what we now decide is that when the power of eminent domain is thus called into play as a handmaiden to the police power and in order to make its proper exercise effective, it is necessarily for a public use [p. 226].

Since all other restrictive measures have proved inadequate, it would mean, if plaintiff's viewpoint be correct, that, so far as any remedies now known are concerned, the abolition of slum districts is beyond the present constitutional power of the State. Such a conclusion should be avoided unless inescapable. The marked tendency of modern decisions is in aid of city planning and the improvement of housing conditions. Acts similar to those here under consideration have been held constitutional in *Willmon v. Powell*, 91 Cal. App. 1, 266 Pac. 1029; *New York City Housing Authority v. Muller*, 270 N.Y. 333, 1 N.E. (2d) 153; *Spahn v. Stewart*, 268 Ky. 97, 103 S.W. (2d) 651 [p. 227].³⁹

39. Similarly explicit recognition that the power of eminent domain is a proper method of accomplishing ends justified under the police power had been given in the drainage cases, *supra*, and is found also in *State ex rel. Airports Inc. v. Minneapolis-St. Paul Met. Airport Com.*, 223 Minn. 175 (1947) 25 N.W. 2d 718; *In re Brewster Street Housing Site*, 291 Mich. 313 (1939); *Matthaei v. Housing Authority*, 177 Md. 506 (1939).

In California the right of a housing authority to build housing projects in nonslum areas on vacant land was challenged. The statute under which the authority acted empowered it to locate a project in relation to "any larger plan or long range program for the development of the area." In upholding the statute the court found that any interpretation of the act which would require the location of projects on slum land would "thwart the very purpose for which it was passed and effectively block slum clearance where the problem is most acute." *Reggin v. Dockweiler*, 15 Cal. 2d 651, 104 P 2d 367 (1940). (See also *Ryan v. Housing Authority*, 15 A 2d 647 [1940]). Similarly, the Michigan court, answering an attack upon the selection of a site containing much nonslum property, stated that "slums can be eradicated only by re-planning of the entire neighborhood. . . . The public is interested not only in slum clearance but also in giving healthful and moral surroundings to those with very small incomes (*In re Jeffries Home Housing Project*, 306 Mich. 638, 647, 11 N.W. 2d 272 [1943]).

In all the decisions upholding public housing the courts considered the purpose to be accomplished by the taking,⁴⁰ and interpreted public use in relation to the needs of society:

While thus the changing requirements of necessity and public policy have apparently cut down or eliminated the public character of some uses, they have caused other uses to become public [*Fountain Park v. Hensler*, 199 Ind. 95, 155 N.E. 465 (1927)].

In the very nature of the case, modern conditions and the increasing interdependence of the different human factors in the progressive complexity of a community make it necessary for the government to touch upon and limit individual activities at more points than formerly [*In re Kansas City Ordinance*, 298 Mo. 569 (1923), 252 S.W. 404].

The modern recognition of an enlarged social function of government . . . called for an advance over previous legal conceptions of what constitutes a public use justifying the exercise of the power of eminent domain [*Belovsky v. Redevelopment Authority*, 357 Pa. 329 (1947), 54 A. 2d 277].

The definition is left, as it must be

. . . to the varying circumstances and situations which arise, with special reference to the social and economic background of the period [*Dorman v. Philadelphia Housing Authority*, 331 Pa. 209, 200 A 834 (1938)].

40. P. Nichols, Jr., *op. cit.*, p. 624. Thus the Ohio courts have held that the housing projects are for a private use, to wit, occupancy by private tenants, and therefore not exempt from taxation, but has upheld the building of such projects and the condemnation of land for the public purpose of clearing slums. *State v. Sherrell*, 136 Ohio 328 (1940). See also *Blakemore v. Cincinnati Met. Housing Authority*, 74 Ohio App. 5, 57 N.E. (2d) 397 (1943) where the taking of nonslum land adjacent to a housing project for use as a parking lot was upheld. The court said: "It must be noted although [*sic*] that after the area cleared is used for the private purpose of low rent housing units, still the public purpose of slum clearance continues. Slums are not again created. The slums remain cleared of elements antagonistic to the health, morals, and welfare of the public" (p. 401).

To be guided solely by whether a given activity had, at some previous time, been recognized as a public purpose would make the law static [*Laret v. Dickman*, 345 Mo. 449, 134 S.W. 2d 65 (1939)].

The term "public use" is a flexible one. It varies with the growing needs of a more complex social order [*Knoxville Housing Authority v. City of Knoxville*, 174 Tenn. 76, 123 S.W. 2d 1085 (1939)].

A review of the cited cases from our jurisdiction demonstrates that this Court has adopted a liberal view concerning what is or is not a public use [*Housing Authority of Dallas v. Higginbotham*, 135 Texas 158 (1940), 143 S.W. 2d 79].

The reason of the case and the settled practice of free governments must be our guides in determining what is or what is not to be regarded as a public use [*Mum-power v. Housing Authority of Bristol*, 176 Va. 426 (1940), 11 S.E. 2d 732].

It is the consensus of legal journals that by the public housing decisions the courts have abandoned the "use by the public" test with respect to governmental exercise of the power.⁴¹

Subsequent to the development of low-rent housing programs, some states embarked upon a more comprehensive program of urban redevelopment, under which blighted areas might be condemned and turned over to private corporations for redevelopment in accordance with a plan approved by the local authorities. Against such enactments the charge of private use was once more raised. Such laws have been upheld in decisions specifically providing that the rehabilitation of blighted areas may be undertaken by condemnation "regardless of the use to which the property might afterwards be put."⁴²

In New York, the Court of Appeals upheld the condemnation of private land for clearance and resale to private companies that would build moderate rental housing. Despite a constitutional provision that slum clearance and rehabilitation are public uses, the charge was made that the benefit to the private redevelopment companies and their tenants was of such a nature as not to be within the contemplation of the constitutional provision. The court found that the taking was for a public use, saying: "If upon the completion of the project the public good is enhanced, it does not matter that private interest may be benefited" (*Murray v. LaGuardia*, 291 N.Y. 320, 52 N.E. [2d] 884, cert. den).⁴³

41. "The Public Use Limitation on Eminent Domain: An Advance Requiem," 58 *Yale L.J.* 575; McDougal and Mueller, "Public Purpose in Public Housing," 52 *Yale L.J.* 42; P. Nichols, Jr., *op. cit.*, p. 615; "Validity of State Condemnation for Low Cost Housing," 45 *Yale L.J.* 1519; "Control and Development of Land under the Proposed British Town and Country Planning Bill," 60 *Harvard L. Rev.* 800; Smith, "Legality of the Denver Housing Authority," 12 *R.M.L. Rev.* 30.

42. *People ex rel. Touhey v. Chicago*, 394 Ill. 477, 483, 68 N.E. (2d) 761, 765 (1946).

43. Since that time a New York decision has made clear the breadth of the governmental powers to condemn for the public benefit. *Weitzner v. Stitchman*, 64 N.Y.S. (2d) 50, 271 App. Div. 255, *aff'd*, 296 N.Y. 907 (1946), upheld the taking of vacant apartments, customarily rented for summer occupancy only, to provide year-round housing for veterans during the housing emergency because, the court says ". . . such a taking has a sufficient tendency to increase housing facilities."

In Pennsylvania, the redevelopment statute was upheld against a similar challenge. The court found that the redevelopment law had one purpose—to clear blighted areas. Experience having shown that neither private enterprise nor the police power alone could accomplish the desired end, the taking by eminent domain is justified. The taking is for the purpose of clearance of blight, not for the purpose of holding it after clearance. “Nor does the taking lose its public character because there may exist in the operation some feature of private gain, for if the public good is enhanced, it is immaterial that a private interest also may be benefitted” (*Belovsky v. Redevelopment Authority*, 357 Pa. 329, 54 A 2d 277 [1947]).

In Illinois the redevelopment statute first challenged empowered neighborhood redevelopment corporations, after receiving a certificate of public convenience and necessity, to condemn blighted areas for redevelopment in accordance with an approved plan. The court found the act “purely an act for slum clearance and rehabilitation of slum and blighted areas,” and further found that “when such areas have been reclaimed and the redevelopment achieved, the public purpose has been accomplished” (*Zurn v. City of Chicago*, 59 N.E. [2d] 18, 389 Ill. 114 [1945]).

The following year the court considered another facet of the legislative program for sound development of Illinois cities, and in *People ex rel. Touhey v. Chicago*, 394 Ill. 477, 68 N.E. (2d) 761 (1946) found constitutional a provision for cities to take by eminent domain either improved or unimproved land “necessary or appropriate for the rehabilitation or redevelopment of any blighted or slum area,” with power in the cities to resell or lease such land [Ill. Rev. St. 1945, a. 24 Sec. 23–103.1]. The court, relying to some extent upon the *Zurn* case, found that the purpose was to eliminate slums and blight, which is a public purpose, not for the advantage of an individual, and the fact that the land might be sold after the blight was eliminated did not change the public nature of the taking.

In its most recent decision on the question of public use in a housing case, the Illinois court found that a statute permitting the erection of low-rent housing projects on vacant or nonslum land, without a requirement for the elimination of an equivalent number of slum housing units, was a valid public use and purpose. The act’s purpose and effect, the court said, was to “. . . promote the development of substantial housing and thus aid in *preventing the creation of new blighted areas* and permit existing areas to be cleared” (*Cremer v. Peoria Housing Authority*, 78 N.E. [2d] 276, 282 [1948], 399 Ill. 579, 589). Of the fact that benefits might accrue to individuals, the court said: “Benefits which are not direct to the private corporation or individual con-

cerned, but merely incidental to the public purpose of the statute do not render the legislation invalid" [p. 590].

In 1950 the Pennsylvania Supreme Court passed upon the validity of the first redevelopment project which dealt with a commercial area and did not result in providing improved living or residential area. The court found that it was proper for the Pittsburgh Redevelopment Authority to exercise the power of eminent domain for the purpose of "redesigning and rebuilding such areas within (its) limits as, by reason of the passage of years and the enormous changes in traffic conditions and types of building construction, no longer meet the economic and social needs of modern city life and progress" (*Schenck v. Pittsburgh et al.*, 364 Pa. 31, 37 [Advance Sheets]). In arriving at this conclusion the court took into consideration the "economically and socially undesirable land uses" which were shown to exist, and the fact that there had been "a continuous reduction in appraised value of the properties for tax purposes."

These decisions⁴⁴ make it clear that the taking of land for the purpose of imposing upon it a healthy pattern of use beneficial to the public at large, to prevent future blight, and to aid in the elimination of existing blighted areas are approved public uses. Moreover, the need to provide for the future requirements of municipalities has been recognized and both the police power and condemnation have been upheld when exercised for that purpose.⁴⁵

44. See also *General Development Corp. v. Detroit*, 322 Mich. 495, 33 N.W. 2d 919 (1948) where the Michigan Supreme Court had before it an oblique attack upon the power of Detroit to condemn slum areas for clearance and resale to private developers. The charge was made that the city did not intend to clear the land for some time and would continue to operate the property condemned, collecting rents, etc., and that it was not, therefore, entitled to take. The court did not discuss the question of public use in relation to the resale of the land, merely stating that the power to take for the purposes of the act had been established in the *Jeffries Homes* and *Brewster Street* cases *supra*.

Redfern v. Board of Commissioners of Jersey City, (1948) 59 A 2d 641, 137 N.J.L. 356, where the taking of nonblighted land in New Jersey by condemnation and its leasing to private developers under the Urban Redevelopment Law of 1946 was upheld, but the court limited its approval to that one project, finding it a public use under the constitution then in effect, but pointing out that the 1948 constitution contained a specific provision that the taking of blighted land for redevelopment was a public use. The court said it would not then pass upon the question of whether the new constitution, by failing to include the use of nonblighted land for development as a public use, had made use of such land in that manner a private use.

In 1949 the Rhode Island Supreme Court, in an advisory opinion, upheld by a narrow margin the taking of blighted areas for private development, but so interpreted the statute as to deny the right to take vacant or nonblighted land, standing by itself, for such purposes. On the question of taking vacant land, the court's adverse decision was, to a large extent, based upon the conception that the purpose was aesthetic and the objective private gain to the developer rather than benefit to the public (*Opinion to the Governor*, 69 A [2d] 531).

45. *Davidson Co. v. Rogers*, 198 S.W. 2d 812, 184 Tenn. 327 (1947)—zoning for "the future gain and welfare of the public." See also *Marblehead Land Co. v. Los Angeles*, 47

As early as 1940 the California Supreme Court had upheld the condemnation provisions of a public housing law and found that it was proper to condemn nonslum land, having in mind the section of the law which provided that

In the planning and location of any housing project, an authority shall take into consideration the relationship of the project to any larger plan or long range program for the development of the area in which the housing authority functions [*Reggin v. Dockweiler*, 104 Pac. 2d 367, 15 Cal. (2d) 651].

Thus there was recognized the propriety of condemnation of land for the purpose of promoting sound development of a municipality, as well as for slum clearance.⁴⁶

The courts regard the use of eminent domain not only as a means of supplementing the police power as a proper tool for the elimination of an evil, but also as a means of promoting affirmative benefits. Eminent domain is particularly desirable when preventive measures are so extensive as to be unduly burdensome upon owners.

Thus in *Muller v. New York City Housing Authority* (270 New York 333 (1936) the court said:

Now, in continuation of a battle, which if not entirely lost, is far from won, the Legislature has resorted to the last of the trinity of powers by giving to a city agency the power of eminent domain. We are called upon to say whether under the facts of this case, including the circumstances of time and place, the use of the power is a use for the public benefit—a public use—within the law [pp. 339–40].

The fundamental purpose of government is to protect the health, safety and general welfare of the public. All its complicated activities have that simple end in view. Its power plant for the purpose consists of the power of taxation, the police power and the power of eminent domain. Whenever there arises in the State a

Fed. 2d 528, cert. den. 284 U.S. 634. *City of Charlotte v. Heath*, 226 N.C. 750, 40 S.W. 2d 600 (1946)—permitting expansion of sewer to community outside city limits: "Not only does a city expand its limits from the increasingly populous territory surrounding it, but it cannot afford to be indifferent to the problems produced by the congestion on its borders." *Light v. City of Danville*, 168 Va. 181, 190 S.E. 276 (1937)—a city may condemn land for a larger power plant than presently needed in planning for its future development. *Miller v. City of Georgetown*, 191 S.W. 2d 403, 301 Ky. 241—to relieve congestion for the welfare of the city's residents it may provide for parking lots by eminent domain. See also *City of Whittier v. Dixon*, 151 P (2d) 5, (1944), 24 Cal. 2d 664.

46. In many states, the argument developed in brief may be further supported by reference to the legal conditions, restrictions, and other public controls that are required or authorized under the state enabling act, to be imposed either upon the land acquired for development or redevelopment or upon the owners or lessees thereof. The courts may also give consideration to the adopted methods of the condemning agency, with reference to adequate standards for disposing of the land, plans, and practices assuring conservation of the public funds in connection with the sale or lease of property and the prevention of land speculation that otherwise might occur. These elements could play a part in the judicial determination of whether or not the private benefits resulting from the taking may be considered incidental to the public use involved in the slum clearance, redevelopment, and development plan.

condition of affairs holding a substantial menace to the public health, safety or general welfare, it becomes the duty of the government to apply whatever power is necessary and appropriate to check it. There are differences in the nature and characteristics of the powers, though distinction between them is often fine. *But if the menace is serious enough to the public to warrant public action and the power applied is reasonably and fairly calculated to check it, and bears a reasonable relation to the evil*, it seems to be constitutionally immaterial whether one or the other of the sovereign powers is employed [pp. 340-41].

The menace of slums in New York City has been long recognized as serious enough to warrant public action. The Session Laws for nearly seventy years past are sprinkled with acts applying the taxing powers and the police power in attempts to cure or check it. The slums still stand. The menace still exists. *What objections, then, can be urged to the application of the third power, least drastic, but as here embodied probably the most effective of all?* [p. 341, italics supplied].

On the question of when eminent domain should be used instead of the police power, Mr. Justice Holmes said:

As long recognized, some values are enjoyed under an implied limitation and must yield to the police power. But obviously the implied limitation must have its limits or the contract and due process clauses are gone. One fact for consideration in determining such limits is the extent of the diminution. When it reaches a certain magnitude, in most, if not all, cases, there must be an exercise of eminent domain and compensation to sustain the act [*Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922), at p. 413. See also *Panhandle Eastern Pipe Line Co. v. State Highway Commission of Kansas*, 294 U.S. 613, (1935)].

The United States Supreme Court, in upholding the validity of rent control laws passed after World War I, referred to the same point. It said:

The space in Washington is necessarily monopolized in comparatively few hands, and letting portions of it is as much a business as any other. Housing is a necessity of life. All the elements of a public interest justifying some degree of public concern are present. The only matter that seems to us open to debate is whether the statute goes too far. *For just as there comes a point at which the police power ceases and leaves only that of eminent domain*, it may be considered that regulations of the present sort pressed to a certain height might amount to a taking without due process of law [*Block v. Hirsch*, 256 U.S. 135 (1921) (italics supplied)].

The courts have already established the governmental power of eminent domain on a sufficiently broad basis to answer the call for action of Dr. Leonard A. Scheele, surgeon general of the United States, who told Congress:

I might say here it is exceedingly important that the new housing going up currently in our fringe areas not be in fact the slum areas of tomorrow. Already slums of the future are being constructed in many urban fringe areas. . . . The scope of this problem becomes more apparent when we recall that more than three-quarters of the post war housing units in the metropolitan areas of Atlanta, San Francisco, and Washington have been built outside the limits of the central city. . . . In my

opinion, strong action is needed to remedy conditions that exist in these areas, and to prevent further development of such menaces to public health.⁴⁷

POINT II. THE DOCTRINE THAT BENEFIT TO THE PUBLIC IS SUFFICIENT TO SUPPORT THE USE OF EMINENT DOMAIN IS FIRMLY ESTABLISHED IN THE FEDERAL COURTS. THE SUPREME COURT WILL NOT CONDEMN AS A VIOLATION OF THE FOURTEENTH AMENDMENT A TAKING UPHELD BY A STATE COURT AS A TAKING FOR A PUBLIC USE IN CONFORMITY WITH ITS LAWS

When the federal courts have been asked to pass upon the validity of condemnation by the federal government, they have adopted an extremely broad interpretation of public use under the Fifth Amendment.⁴⁸

Condemnation by the United States for the purpose of providing land in California for a plant deemed necessary to the war effort was upheld, the court stating: "The fact that the land taken from appellee is to be sold or leased to others does not of itself invalidate the taking, for the government may so proceed in pursuit of its legitimate purposes" [*United States v. Marin*, 136 F (2d) 388 (1943)].

In 1923 the Supreme Court reviewed the power of the federal government to condemn land for the purpose of resettling persons displaced from a part of a town by a dam built to supply water for irrigation of arid land. It was the appellant's contention that this constituted taking private land from one person for the purpose of giving it to another, and further that the use of condemnation could not be justified by an "exigency created by rapid development." The court found, after reviewing the authorities favoring the narrow construction of eminent domain powers, that the taking was necessary to the completion of the projected dam and that, in order to avoid hardship upon those displaced, compensation by substitution was valid (*Brown v. United States*, 263 U.S. 78).⁴⁹

The need for an elastic concept of the power of eminent domain was recognized by the Supreme Court as early as 1892 when it stated:

In the memory of men now living, a proposition to take private property, without the consent of its owner, for a public park, and to assess a proportionate part of the cost upon real estate benefitted thereby, would have been regarded as a novel exercise of legislative power. . . . The validity of legislative acts erecting such parks, and providing for their cost, has been uniformly upheld [*Shoemaker v. United States*, 147 U.S. 282].

47. "Hearings before a Subcommittee of the Committee on Banking and Currency, United States Senate, 81st Congress on . . . Bills pertaining to General Housing Legislation, February 1949," pp. 437-38.

48. See *Hanson Co. v. United States*, 261 U.S. 581 (1922), where the power of the government agency to condemn was said to be coextensive with its power to purchase.

49. See also *P. Nichols, Jr., op. cit.*, p. 628.

When the national government undertook a program of conservation, flood control, and wild life management under the National Industrial Recovery Act, its power to condemn land was challenged in many districts. Uniformly the government was upheld, and the District Court for the Western District of New York, finding that the program was designed to conserve natural resources and was charged with grave national interests, quoted from the Supreme Court decision in *Helvering v. Davis*, 301 U.S. 619 (1937) as follows: "Nor is the concept of general welfare static . . . what is critical and urgent changes with the times."⁵⁰

When the Supreme Court had before it decisions of a district court and a circuit court of appeals severely limiting the power of eminent domain of the Tennessee Valley Authority, in 1946, it once more upheld the broad power of federal agencies to condemn (*U.S. ex rel. T.V.A. v. Welch*, 327 U.S. 546). The TVA in building a dam had flooded over the only highway giving access to land on a mountainside between the lake thus formed and a national park. State, county, and federal officials had agreed that the cost of building a new road for use by the very limited number of residents of the area would be prohibitive and it was thereupon decided among these parties that the TVA would condemn the land and convey it to the Park Service to be annexed to the national park. Against such condemnation it was argued that such a taking was not necessary to the purposes for which TVA was established, to wit, "for national defense, to improve navigation, control destructive floods, and promote interstate commerce and the general welfare."

Mr. Justice Black, for the court, pointed out that the lower courts had erred in finding the proposed use "private" and that the error arose because the problem had not been considered as a whole. The purpose of the TVA as established by Congress is more than to build isolated dams. Its purpose is a broad, inclusive one of rehabilitating this region. Viewed from that perspective the government may use its power of eminent domain to make common sense adjustments which will provide adequate compensation for damages and promote the program as a whole.

Thus, the federal courts construed the Fifth Amendment as not limiting the use of the power of eminent domain to effectuate any broad program in which the federal government may properly engage.

When the Supreme Court has been called upon to review the exercise of the power of eminent domain by a state or local government, where it is claimed that the taking constitutes a violation of the due process

50. *In re United States*, 28 F Supp. 728 (1939). To the same effect: *U.S. v. 80 Acres of Land*, 26 F Supp. 315 (D.C.E.D. Ill. 1939); *U.S. v. Dieckmann*, 101 F (2d) 421.

clause of the Fourteenth Amendment, an equally broad interpretation of the power of eminent domain has been adopted.

The court in 1896 upheld the power of a local irrigation project to condemn, when the protections of the Fourteenth Amendment were the basis of defense, and the court recognized that were the state powerless to act:

Millions of acres of land otherwise cultivable must be left in their present arid and worthless condition, and an effectual obstacle will remain in the way of the advance of . . . the state in material wealth and prosperity. To irrigate and thus bring into possible cultivation these large masses of otherwise worthless lands would seem to be a public purpose and a matter of public interest, not confined to the landowners or even to any one section of the state [*Fallbrook Irrigation Dist. v. Bradley*, 164 U.S. 112, 161].

In 1905 and 1906 the court, upon the ground of public welfare, upheld statutes delegating the power of eminent domain to private persons to further the development of natural resources.⁵¹ The court stated the rule to be that where state law required concessions of private rights for the public welfare because of unusual local needs "there is nothing in the Fourteenth Amendment which prevents a state from requiring such concessions" (*Strickley v. Highland Boy Mining Co.*, *supra*).

By 1908 the court had passed upon the use of eminent domain to promote drainage, irrigation, mining, and similar projects undertaken by local governments or individuals, and was able to state: "No case is recalled where this court has condemned as a violation of the Fourteenth Amendment a taking upheld by the state court as a taking for a public use in conformity with its laws." (*Harston v. Danville and Western R.R. Co.*, 208 U.S. 598, 607).⁵²

In 1916 Mr. Justice Holmes, speaking for the court, declared that the test of "use by the public" was "inadequate" (*Mt. Vernon Woodbury Cotton Duck Co. v. Alabama Power*, 240 U.S. 30) and that statement has been cited with approval in many state courts since that time.

In 1923 the court pointed out that "not only present demands of the public but those which may be fairly anticipated in the future may be considered" (*Rindge Co. v. Los Angeles*, 262 U.S. 700).

A more positive presentation of the tests which the federal courts

51. *Clark v. Nash*, 198 U.S. 361, and *Strickley v. Highland Boy Mining Co.*, *supra*.

52. McKean, "Constitutional Limitations of the Power of Eminent Domain," 6 *R.M.L. Rev.* 14, 22; P. Nichols, Jr., *op. cit.* It is true that the decision of the Supreme Court in 1874 invalidating the use of tax funds to support private industry in *Loan Association v. Topeka*, 87 U.S. 655, was frequently cited in defense of the "use by the public" test. Yet, with the exception of *Missouri Pacific Railroad v. Nebraska*, 164 U.S. 403 (1896), no other decision which could be interpreted as applying the "use by the public" rule can be found, and in the *Harston* decision, *supra*, the court pointed out that the Nebraska court had not held the taking there to be for a "public use."

will apply to the use of eminent domain under the Fourteenth Amendment is found in the opinion of the 3d Circuit Court of Appeals in *People of Puerto Rico v. Eastern Sugar Associates*, 156 F (2d) 316, cert. den., 329 U.S. 772 (1946). The court there had under review a statute passed by the Puerto Rican Legislature and at the outset explained that while the powers of the legislature to provide for condemnation were limited by the Fifth Amendment, those limitations would be interpreted in the light of cases dealing with the actions of states under the Fourteenth Amendment.

The statute involved provided for the creation of a Land Authority "for the purpose of carrying out the agricultural policy of the people of Puerto Rico . . . and to take necessary action to put an end to existing corporation latifundia (and) block its reappearance in the future, to insure to individuals the conservation of their land, assist in the creation of new landowners, facilitate the utilization of the land for the best public benefit, . . . and take all action leading to the most scientific, economic and efficient enjoyment of the land by the people of Puerto Rico." To effectuate the purposes of the Act, the Land Authority was authorized to request the insular government to condemn land "necessary or advisable for the purposes of the Authority." The Act contemplated that land so acquired could be disposed of by the Authority (1) to squatters for erection of dwellings, (2) to farmers for subsistence farms, and (3) to scientific agronomists for large-scale farming. By provisions applicable only to the island involved in the litigation, the statute empowered the Land Authority to acquire through condemnation proceedings land belonging to the Eastern Sugar Associates, largest land owner on the island, and the land so acquired was to be devoted to the growing of products necessary to the development of the sugar and liquor industries, in direct competition with Eastern Sugar Associates.

The court said that "if any one of those uses, *each considered, however, as a part of a broad, integrated program of agrarian reform* as will be pointed out hereafter, is not public, the petition was properly dismissed" (pp. 320, 321, italics supplied).

After reviewing the legislative findings of the need for the taking and the evils it was intended to alleviate, the court pointed out that eminent domain need not rest upon the power to protect the public health, and could properly be exercised to promote the prosperity of the community. Among the evils described as supporting the legislation is the dense population, the existence of a large population without homes, the poverty, etc. Finding each taking and proposed use part of "a single integrated effort to improve conditions on the island" (p. 323), the court held the legislation within the power of the Territory

The court relied heavily upon the decision in *U.S. ex rel. T.V.A. v. Welch*, in emphasizing the need to look at the total program for the furtherance of which the land is taken, in order to determine the question of public use.⁵³

CONCLUSION

Space for living and working healthfully and decently is a most precious asset. While land was plentiful this asset was squandered without giving thought to the future; now that it is scarce we can no longer afford its waste. Today it is necessary that "the land policy of a community, like its policy with respect to any other resource, should be designed to implement its total policy—that is, designed to further to the utmost the efforts of its people to secure for themselves all of the basic values for which the community exists."⁵⁴

In accordance with the changing needs of changing times and when new public necessities have arisen, federal and state courts, through their decisions, have required that private land ownership yield to the demands of the public welfare. Lack of precedent has not deterred them.

The federal Housing Act of 1949 is designed to enable communities to meet new public necessities in a new way in that it contemplates the taking of open land and its resale, subject to controls, to private companies or public agencies for development in accordance with a community development plan. There is no body of precedent supporting such a taking because the circumstances of time and place have not until now made such a taking imperative. But neither is there any body of precedent holding that vacant land can under no circumstances be deemed to be for a public use or that the use is not public because some incidental private benefit may result. There is no difference, except one of degree, between blighted land which adversely affects health and welfare and open land which, by its nonuse, keeps people crowded in unhealthful surroundings. Halfway measures have never cured, indeed they cannot cure or even arrest the disease that plagues our cities. To deal with the problem adequately the courts must find that conditions today require the taking of vacant land for

53. While this decision is not binding upon any state court in determining public use under state law, it is persuasive of the logic of extending the concept of public use to permit the densely populated urban areas of our country to exercise the power of eminent domain in such a manner as to conserve living space, provide for the most socially beneficial use of the relatively small amount of land available, and prevent the appearance of blight on the fringes of the cities. See 59 *Harvard L. Rev.* 1163, which takes the position that the concept of public use is greatly broadened by this decision.

54. Myres S. McDougal, "Municipal Land Policy and Control," 242 *The Annals of the American Academy of Political and Social Science* 87 (Nov., 1945).

sound community development, which in itself is a public use. The spirit in which the courts should meet this problem was expressed in the opinion in *New York City Housing Authority v. Muller*:

Over many years and in a multitude of cases the courts have vainly attempted to define comprehensively the concept of a public use and to formulate a universal test. They have found here as elsewhere that to formulate anything ultimate, even though it were possible, would, in an inevitably changing world be unwise if not futile. Lacking a controlling precedent, we deal with the question as it presents itself on the facts at the present point of time. "The law of each age is ultimately what that age thinks should be the law."⁵⁵

55. 270 N.Y. 333, 340, 1 N.E. 2d, 153, 155.

CHAPTER II

SOCIAL AND ECONOMIC MATERIAL

INTRODUCTION

THE American constitution and the legal systems of the several states are endowed with such flexibility that they have been able to respond to the changing demands of a social and economic way of life undreamed of when they were devised at the end of the eighteenth century. This responsiveness to the changing times is well expressed by the United States Supreme Court in *Home Building and Loan Association v. Blaisdell*, 290 U.S. 398, at 442 (1934):

It is manifest from [a] review of our decisions that there has been a growing appreciation of public needs and of the necessity of finding ground for a rational compromise between individual rights and public welfare. The settlement and consequent contraction of the public domain, the pressure of constantly increasing density of population, the interrelation of the activities of our people and the complexity of our economic interests, have inevitably led to an increasing use of the organization of society in order to protect the very basis of individual opportunity. Where in earlier days it was thought that only the concerns of individuals or of classes were involved, and that those of the State itself were touched only remotely, it has later been found that the fundamental interests of the State are directly affected, and that the question is no longer merely that of one party to a contract as against another, but of the use of reasonable means to safeguard the economic structure upon which the good of all depends.

Problems involving land tenure have profited, in common with other problems of society, from this progressive attitude of our courts. Thus forest conservation has been upheld, because "the amount of land being incapable of increase, if the owners of large tracts can waste them at will without state restriction, the state and its people will be helplessly impoverished and one great purpose of government defeated" (*Opinion of the Justices*, 103 Me. 506, 511, 69 A. 627 [1908]). Likewise, the decisions upholding condemnation for public housing have reviewed the story of human misery in the slums and the cold facts showing the drain on the public treasury resulting from these conditions, in order to establish the compelling necessity that society act to eliminate slums; and to proceed from there to determine whether the legislation through which these evils were attacked could reasonably be expected to accomplish that purpose. Once these two cardinal

points were established, private rights in real property were required to yield to the public necessity. Much the same material was relied upon by the courts with respect to urban redevelopment in blighted areas.

It is inescapable, and properly so, that the courts will look to the demonstrated public need and benefit in order to determine the validity of the power to condemn open land under redevelopment legislation.

It is an inherent component of the judicial process to employ the "method of sociology" (Justice Cardozo, *The Nature of the Judicial Process* [Yale University Press, 1925]) to help decide cases, and particularly is this so when a public power sought to be exercised is challenged as not dedicated to a public purpose. In the past fifty years, courts have become increasingly specific in the social and economic data upon which they base their decisions. This in turn is a reflection of the increasing use of the "sociological brief" first made popular by its effective use by Mr. Justice Brandeis as counsel in *Muller v. Oregon* (208 U.S. 412, 52 L. Ed. 551) in 1905, involving the regulation of hours of labor. *Just as the courts rely on counsel to marshal the relevant legal authorities, so do they rely on counsel to marshal for them the compelling sociological data.*

The significance of this for the matter at hand is that a brief which seeks to persuade a court to uphold the use of eminent domain to acquire open land under redevelopment legislation will be no better than the social and economic arguments and supporting data that are included in the brief or as an appendix thereto. To establish that the courts have upheld the use of the power of eminent domain to secure a public benefit is not enough; it is equally essential to show, by the citation of authorities from the literature of land use and municipal planning and control, that a public benefit will be secured by condemnation under the redevelopment in question.

Brief writers in the public housing cases, and in the redevelopment cases involving built-up areas, could draw on volumes of analysis by social scientists extending back over many years. The literature of planning and land economics, however, shows much less study of the vacant land problem, both in the form of dead subdivisions and in large unplatted holdings, than that of blight in the central areas of cities. Some studies of premature subdivisions have been made that contain valuable evidence of tax delinquency and financial burdens on municipalities; but little if any material can be found in regard to the large unsubdivided tracts on the periphery of our cities.¹ In view of this pau-

1. Philip H. Cornick, *Problems Created by Premature Subdivision of Urban Lands in Selected Metropolitan Districts*, State Planning Council of New York, 1938; *Dead Land, a Report to Illinois State Housing Board* (March, 1950); *Land Subdivision in New Jersey, Its Extent, Quality and Regulation*, (N.J. State Planning Board, 1938); *Premature Land*

city of material, in any city where condemnation of vacant peripheral land is contemplated under a redevelopment statute, a particularly thorough study will have to be made to gather those facts which would be compelling in a court argument on the necessity for the taking.

In the succeeding pages of this monograph we shall present sample material culled from many cities that bears upon the need for action to insure that such vacant land as is left in our cities will be used for the welfare of all. The purpose of the following presentation is to suggest the type of material that is appropriate and available for use in litigation over the validity of such governmental action.

Parenthetically it may be observed that we are concerned in this memorandum with the types of sociological and economic material that would apply where the vacant land is sought for purposes of sound community growth other than to house displaced persons from blighted areas. An argument on the need for vacant land to rehouse those persons can easily be developed from figures the local agency would have at hand. It has already been noted that certain of the public housing decisions support the theory that development of new areas should go hand in hand with the redevelopment of blighted areas.²

Naturally it will do no good to persuade the court of the public benefit secured by the condemnation of open land for redevelopment in general, if counsel fail to show that the general conditions apply in the case at bar. In the final analysis, it is the features of the individual redevelopment plan at issue that are decisive; the general social and economic data provide tools for their analysis. Therefore it is incumbent upon counsel for the local redevelopment agency to make and present

Subdivision, a Luxury (N.J. State Planning Board, 1941); Edmund N. Bacon, "A Diagnosis and Suggested Treatment of an Urban Community's Land Problem," *Journal of Land and Public Utility Economics*, XVI (February, 1940), 72; *Public Land Acquisition*, Part II: "Urban Lands" (National Resources Planning Board, February, 1941), pp. 2 ff. For a discussion of the paucity of material available, see Coleman Woodbury, "Housing in the Redevelopment of American Cities," *Land Economics*, XXV (Nov., 1949), 402. Few if any writers in the journals have done more than state that large tracts of unsubdivided land ought to be included in redevelopment plans. *A Study of Blighted Vacant Land*, prepared for the Chicago Land Clearance Commission by the Chicago Plan Commission, May, 1950, is as broad as the scope of this memorandum, and provides valuable leads on the data which can be made available by the planning profession to the brief writer.

2. E.g., *Dornan v. Philadelphia Housing Authority*, 331 Pa. 209, at 225, 200 A. 834 (1938); *Reggin v. Dockweiler*, 15 Cal. 2d 651, 104 P.2d 367 (1940); cf. *Cremer v. Peoria Housing Authority*, 399 Ill. 579, 589, 78 N.E. 2d 276, 282 (1948), all cited and discussed in chap. i. See also testimony of Edward Weinfeld, "Hearings before a Subcommittee of the Committee on Banking and Currency, U.S. Senate, 81st Cong. on . . . Bills Pertaining to General Housing Legislation, February 1949," pp. 231 ff.: "Slum clearance is ultimately effected not only by a frontal attack on the congested site but also by the development of sound communities, existing and new, in urban and suburban areas and on open land. . . ."

an exhaustive examination of the site in question from the standpoints shown to be relevant by the literature in the field.³

Ideally, the necessary studies should be made well in advance of litigation, so that when the local agency embarks upon its first or "test case," it will not unnecessarily risk defeat of its entire future program, to say nothing of jeopardy to similar programs elsewhere in the state and nation. Such risk is held to a minimum if the first open site chosen for redevelopment gives the best demonstration that can be made in that community of the need for public acquisition and redevelopment and of the benefits that will accrue to the public.⁴

POINT III. SOCIAL AND ECONOMIC EVILS FLOW FROM PREMATURE LAND SUBDIVISION, AND FROM THE LACK OF PLANNED DEVELOPMENT OF VACANT LAND. THE CONDEMNATION OF SUCH LAND AND ITS RESALE FOR PRIVATE OR PUBLIC DEVELOPMENT IN ACCORDANCE WITH A PLAN FOR SOUND COMMUNITY GROWTH IS REASONABLY RELATED TO THE PUBLIC WELFARE⁵

A. LAND USE AND PROBLEMS OF URBAN PLANNING AND GROWTH

1. *Comparative increase of population at the periphery of cities.*—Although a larger percentage of the American population is now classified as urban than ever before, at the same time the concentration of urban population is no longer taking place in the centers of cities. Within the areas described by the Census Bureau as "metropolitan districts," which include cities and their satellites, there is an increasing population trend toward the periphery. Thus in the years 1930–40 satellite areas increased in population more rapidly than did the city itself. At the same time, within the city, a similar decentralization took place, so that the areas with the most rapid growth in population were the fringes.⁶

The following table, which was prepared from Census data for 1930 and 1940, shows the increase in the population of areas in the cities bounded by concentric circles having an increasing radius.

3. See "A Study of Blighted Vacant Land," *op. cit.*, for an excellent example of proper preparation for a test case.

4. In addition, the pivotal first project should be screened for such considerations as whether a test case based on the project would clearly pose the major issues.

5. In cases where the taking of vacant land is part of a program involving the redevelopment of a substandard area, counsel may limit the basic proposition to the precise issue in the case. Some of the objections to the broad proposition stated above may thus be avoided.

6. Warren S. Thompson, *Growth of Metropolitan Districts, 1900–1940* (Washington: Bureau of the Census, 1948).

Preliminary releases of 1950 Census data on population, where available, give evidence of a continuation and possibly even an acceleration of this trend in the past decade.

TABLE 1

PERCENTAGE OF INCREASE IN POPULATION OF GROUPS OF CENSUS TRACTS LYING WITHIN
GIVEN DISTANCES FROM CENTER OF CITY, FOR SELECTED CITIES, 1930-40*
(A minus sign (-) denotes decrease)

Distance from Center of City	Los Angeles	New York	Chicago	Phila- delphia	Cleve- land	Cin- cinnati	Boston	Pitts- burgh
Within 1 mile..	3.9	-10.7	-7.2	-10.5	-11.5	-6.6	-11.8	-5.0
1-2 miles.....	7.4		-10.7	-8.9	-7.9	-7.5	-8.3	-1.1
2-3 miles.....	10.8		-8.4	-1.8	0.2	2.0	0.9	-0.3
3-4 miles.....	9.6	0.7	-1.5	-2.3	-3.4	1.3	4.6	2.5
4-5 miles.....	9.0	7.4	0.6	-2.4	-4.6	3.0	4.2	5.5
5-6 miles.....	16.6		2.5	0.5	13.9	6.7	8.1	-1.2
6-7 miles.....	34.8		19.7	0.7	16.9			
7-8 miles.....	65.2	3.9	35.1	5.0	13.2			
8-10 miles.....	82.4	12.8	4.9		20.3	8.1	-1.2	
10-12 miles....	109.8	21.1	4.7					
12 and over....	52.6							
Total.....	21.5	7.6	0.6	-1.0	-2.5	1.0	-1.3	0.3

Distance from Center of City	Buf- falo	St. Louis	Indian- apolis	Colum- bus, Ohio	Wash- ington, D.C.	Nash- ville	Dayton	New Haven
Within 1 mile..	0.6	-18.3	0.4	6.7	20.9	2.3	8.3	-3.1
1-2 miles.....	0.6	-4.6	5.6	1.7	31.2	8.3	1.1	-0.3
2-3 miles.....	-3.6	-2.7	4.5	3.7	45.3	10.1	8.3	-0.2
3-4 miles.....	-2.3	-0.7	5.8	12.2	83.3	16.7		
4-5 miles.....	3.1	2.7	21.7					
5 and over.....	16.8	14.3						
Total.....	0.5	-0.7	6.3	5.3	36.2	8.8	4.8	-1.3

* Thompson, Growth of Metropolitan Districts, 1900-1940, p. 9.

It can be seen at a glance that the general trend is for the center of the city to lose population or grow at a very slow rate, while the intermediate points grow slowly and the outlying sections grow at a fairly rapid rate. This is a common experience in American cities. As stated by Riemer,

Growth, in the history of the rapidly expanding communities of the United States, has always been peripheral growth. Incorporation procedures have always lagged behind the actual expansion of the urban community. Any distinction between metropolitan region, suburb and city proper is necessarily an arbitrary one. Population increase in the outskirts is, thus, a simple phenomenon of growth and does not indicate a new or revolutionary trend toward decentralization.⁷

2. *Availability of land for future development.*—Formerly the land problem in our major cities was how the city could best dispose of the large tracts of land which it owned. The land policy of city, state, and federal governments was one of disposing of land, usually as a source

7. Svend Riemer, "Escape Into Decentralization?" *Land Economics*, XXIV (February, 1948), 40.

of revenue.⁸ As the result of this policy, cities once rich in land holdings impoverished themselves and then, at a later date, purchased land as needed for public buildings. The policy of disposing of municipal land holdings, however, had been developed prior to the enormous urban growth of the last hundred years, when it was not anticipated that cities would outgrow available space. This is not the case today. Useable land is now a precious resource in our cities—and it is being wasted.

A general description of the pattern of land use in the growing city is graphically given by G. M. Tucker:

In a growing city land values tend normally to rise and outlying sections, which give promise of early development, are snapped up by speculators, sometimes to be held for many years. Beyond this belt lies a remote section which shows little speculative advance, and to it many must resort to procure homes within their means, suffering all the drawbacks and expense of time consuming transportation. Thus we have a congested core with prices correspondingly inflated, surrounded by a speculative zone where little or no development is taking place. Beyond that belt there is a semi-suburban tract fast being taken up, but in the intermediate area, neglected and deserted, everything is held up pending the realization of speculative hopes, and though these are often doomed to disappointment, the harm is done.⁹

a) *Premature subdivisions*: The most widely recognized factor in the lack of an effective land supply is the "dead" or arrested subdivision, which comprises vast areas in many cities. Two hundred fifty thousand parcels of chronically tax-delinquent and abandoned land were found in Cook County, Illinois, in March 1950:

In the outlying sections of the municipalities the conglomerate of "dead" land, the problem with which we are particularly concerned, is due to uncontrolled subdivision platting. As we look back upon the promotional subdividing of the "twenties" when raw acreage was staked out as prospective homesites on twenty-five foot lots, when utilities were installed, or when subdividers failed to install them, when the gridiron street pattern overlayed the countryside and when we provided enough subdivided land to accommodate an astronomical population which never materialized, it is not without astonishment that we find vast areas of vacant land. The sale of large blocks of vacant land before it has an economic use has produced extensive tax delinquency and abandonment, which for all intents and purposes is now "dead" land.¹⁰

8. George Joseph Stigler, "Some Economic Aspects of Municipal Land Policies of American Cities," unpublished Master's thesis, Northwestern University, 1932; *Public Land Acquisition*, Part II: "Urban Lands," National Resources Planning Board (February, 1941), p. 11.

9. *The Self Supporting City* (New York: Schalkenback Foundation, 1946), p. 35.

10. *Dead Land—A Report to the Illinois State Housing Board*, Housing Authority of Cook County, March, 1950, pp. 6-7. In presenting materials on this and allied points at hearings or in briefs, maps and aerial photographs could be used to show, for example, the approximate limits of built-up areas, the dead subdivision territory, and the location of recent residential and industrial building. These could be referred to in the course of the following discussion.

A similar study was undertaken for the State of New York in 1938. It was found that:

For the sections within which our counts are complete, the figures disclose that 501,669 vacant and presumably unused parcels of taxable lands have been made ready for urban occupancy in advance of need. . . . Enough information has now been presented to demonstrate that prematurely subdivided lands occur in large numbers in all of the urban and suburban areas which have been studied.¹¹

The New York study concluded similarly that many of the vacant lots would not be used for urban purposes within ten, twenty, thirty, or more years. The lots had been so cut up that they could not revert to productive rural use, and they would not, therefore, produce any income in the meantime.¹²

In the same year, the New Jersey State Planning Board likewise found extensive areas of vacant, platted land:¹³

New Jersey has more than enough vacant building lots to accommodate another four million people. Lands to provide these building lots have been subdivided so uneconomically that their full development will involve a wastage of at least 125 millions of dollars in street improvements alone. Potential excessive cost of other improvements and services are comparable. Many of the subdivided areas, by reason of bad planning, are potential suburban slums. Even at past rates of urban expansion, it will take from 50 to 100 years to absorb all of the already platted land. And we are advised by population experts that we are due for a long period of declining population growth rate. To this vast reservoir of existing vacant building lots, many thousands more are being added each year. . . .

Only very exceptional subdivisions evidence any regard for public necessities other than streets. Almost no provisions have been made throughout the 185,000 acres of premature platted lands for such features as school sites, parks and playgrounds. Also disregarded have been future continuous traffic arteries and planned provision for residential neighborhoods. Added to the potential wastefulness of bad street arrangement must be the ultimate cost of the belated provision of omitted public facilities. Aside from the economic fallacy and futility of much of this speculative land development, so far as the interests of its owners are concerned, it stands now as an obstacle to proper city growth, to the extension of county and city parks, and to the proper location of future county and State highways and many other public improvements. Correction of this threatening situation is difficult but exceedingly important and worth trying. As indicated above, present investment in improvements is relatively slight and not likely to prove, in itself, a serious obstacle to a reclamation or reshaping of unoccupied platted lands. The wide dispersal of ownership, through more or less extensive lot sales, is, however, a serious complication.¹⁴

11. Cornick, *op. cit.*, pp. 90-91.

12. *Ibid.*, p. 108.

13. "Land Subdivision in New Jersey, Its Extent, Quality and Regulation," pp. 18, 20. See also Ernest M. Fisher and Raymond F. Smith, *Land Subdividing and the Rate of Utilisation*, "University of Michigan, Michigan Business Studies," Vol. IV, No. 5, 1932; and Ernest M. Fisher, *Real Estate Subdividing Activity and Population Growth in Nine Urban Areas*, "Michigan Business Studies," Vol. I, No. 9, 1928.

14. *Premature Land Subdivision, a Luxury* (New Jersey State Planning Board, 1941), p. 8.

In 1941 the same body summarized its findings and conclusions as follows: "Prematurely subdivided lands in New Jersey are sufficient to supply over a million 50×120 foot vacant lots, one for every family now resident in the State."¹³

The San Francisco Redevelopment Agency recently initiated the redevelopment of an area comprising well over 300 acres of land, some 82 per cent of which is vacant, "largely because of steep grades, inappropriately platted streets and diverse ownership of land." The history of this area puts in sharp focus the unavailability of such land for the needs of a growing community:

Large parts of the area were originally subdivided as early as 1863 and 1864. Since that time most of the remainder of the area has been subdivided, many portions have been resubdivided and parcels of land have changed hands many times. However, after many years of real estate activity less than ten per cent of the area has been used for building. Since private enterprise alone has been unable to bring the area into use, redevelopment under joint public-private initiative is needed.¹⁵

The area involved is not a peripheral one, being situated close to the geographic center of the city and surrounded on all sides by built-up area.

The Michigan Planning Commission has drawn attention to another factor in the creation of dead subdivisions in its *Study of Subdivision Development in the Detroit Metropolitan Area*, where by the use of charts and maps it points to a checkerboard of varying building cost restrictions and race occupancy restrictions in vacant plats in Garden City and Inkston.¹⁶

b) Vacant unplatted land: The second principal category of vacant land unavailable to relieve the urban need for space consists of land, sometimes large tracts, held by a few owners who have resisted past subdivision booms and are holding out for profits which they hope to realize out of a speculative future increase in value. In his discussion of "Urban Economics and Land Values," Professor Edwin H. Spengler says of such land:

At first we find that certain amounts of vacant space are desirable if they allow for considerable flexibility in the community for new uses. Gradually, such spaces might appear as threats to the stability of the community because people may not be holding the land for uses that would make for the best development of that section.¹⁷

15. *Redevelopment in Diamond Heights*, San Francisco Redevelopment Agency, in consultation with the Department of City Planning, March, 1950, p. vii.

16. 1939, pp. 16-23 on "Unrelated Subdivision Restrictions Have Created Problem Areas."

17. *Discussions on Urbanism* (Reprinted from *Pencil Points*, 1943), Columbia University, New York, p. 7.

While these vacant areas are held off the market, the cities tend more and more to a vertical development, accompanied by increased density of population and consequent intensification of urban problems.

As Sir Raymond Unwin has stated:

The majority of the owners of vacant land within the city must wait one hundred years, and many of them two hundred years before they will realize any value from the use of sites for building purposes. The majority of this land has no real value today and is unlikely to have any for generations to come.

Meantime the owners, on the strength of a gamble with odds of one hundred or two hundred to one against their sites being selected, are holding up their land prices which compel these very high densities, which in turn increase the odds against them.

By reducing the density from one hundred to fifty dwellings per acre, the odds would be halved; by reducing it to twelve they would approach the kind of odds which gamblers are willing to face on the race course. To say that if present methods continue such land is really worthless is indeed an understatement, for it is saddled with a considerable yearly liability for taxes.¹⁸

Considerably less is known about such vacant tracts than about blighted land in central areas or about dead subdivisions.¹⁹ Yet it is clear that large unsubdivided tracts not presently used, which are not on the market at prices reasonably related to actual use value, are no more available for sound community growth than are dead subdivisions, where bad platting, diversity of ownership, and poor titles prevent development.

3. *The effect of the unavailability of land upon housing.*—Let us now examine the results of the withholding of these lands, both vacant tracts and dead subdivisions, upon the provision of adequate living space for urban families. The Housing and Home Finance Agency estimated in 1944 that 12,600,000 additional urban dwelling units were needed within the decade from 1945 to 1955.²⁰ Much of this need must be met on new land; but new land is scarce.

The effect of dead land in creating an artificial shortage of choice

18. *Journal of Land and Public Utility Economics* (February, 1941).

19. From a cursory survey of planning commissions in major cities, it would appear that most of such agencies do not know the amount of vacant land within the city limits. This is particularly true of the large tracts of undivided property, although some of the agencies also did not know the amount of premature subdivisions. An agency which has, however, considered the extent of vacant unsubdivided areas is the San Francisco Redevelopment Agency. The California redevelopment law has broadly defined blight to include "lack of proper utilization, resulting in: (1) unproductive land, (2) loss of population, deterioration and added cost for public facilities elsewhere." The San Francisco Redevelopment Agency found only one extensive unsubdivided tract within the city, and found that it would meet only the criterion of unproductive land. It was concluded that it would not be wise to attempt redevelopment of the area by condemnation in the absence of any additional characteristics of blight.

20. *The Housing Situation—The Factual Background* (Washington: Government Printing Office, June, 1948), Appendix B, p. 10.

sites for housing was described in the Illinois "Dead Land" study as follows:

"Dead" land probably affects the capital cost of housing chiefly by hindering the development of large scale projects, the process of mass production having come to be practically synonymous with the lowering of the "package price" of homes both for sale and rent. In some areas, large scale development must await the present tedious process of clearing up "dead" land, and in others the hopeless tangle of encumbrances totally prevents the assembly of sites large enough for economical development. . . . It does mean, however, that there is an artificial shortage in the supply of highly desirable close in sites in some established communities, this shortage being one factor which forces the consumer either to pay a higher price for such a site or go to an outlying area. . . .

"Dead" land does, however, have a major role in determining the location of new building, and the location of new building is of vital importance to tax hungry municipalities.²¹

In addition to forcing new development farther out, there is evidence²² that the dead subdivision may often force it into relatively undesirable locations in or immediately adjacent to the dead area itself, even into locations that may have been originally zoned for nonresidential purposes.

The Chicago study of blighted vacant land points out that such land is often conveniently located near places of work to which workers are obliged to travel great distances: "These subdivisions are near large industrial centers employing thousands of workers, who now travel great distances to work because adequate houses are not available nearby."²³ Not only are productive efficiency and sound family life adversely affected by this poor relation between home and work, but traffic and other civic problems are created or aggravated thereby.

As a further effect of the unavailability of certain vacant land, Lillibridge has pointed to the increased costs resulting from speculative land values:

. . . if a builder does move into an unimproved section, he has difficulty in blocking out sufficient lands to make a sizable project feasible. . . . The small builder also has land difficulty. The involved ownership and tax condition of much vacant land makes it unavailable to the small scale builder. Frequently, if such a builder, unable as he is to place extensive utilities in vacant land, does contemplate additions to existing developments, speculative land values add greatly not only to his, but the purchaser's cost.²⁴

21. *Op. cit.*, pp. 24-25.

22. No documentation of this point has been found, but it would seem to bear local investigation.

23. "A Study of Blighted Vacant Land," *op. cit.*, p. 87.

24. Robert M. Lillibridge, "Frontiers in Metropolitan Planning and Land Policy," *Land Economics*, XXVI (February, 1950) 46.

Thus, even where the developer is able to find vacant land which is available—marketable title, etc.—it is available only at a price, and speculative prices make it difficult to provide housing that will meet the needs of the community. Hugh Potter, nationally known developer, has described how in the development of River Oaks outside of Houston, Texas, a large contiguous tract of vacant land was found finally on the outskirts of town; and while he paid \$500 per acre for the first few acres acquired, after “the secret leaked out” he had to pay \$6,000 per acre for the balance of the 1,200 acre tract. This experience led him to conclude: “Successful urban redevelopment will also require land acquisition in large contiguous assemblies at prices that permit the developer to put on the land the kind of improvements and environment the community needs.”²⁵

The April 23, 1950, issue of the *New York Herald Tribune* reports similar skyrocketing in land values in areas adjacent to New York City. “One example was a potato farm sold at \$500 per acre in 1945 that recently traded at \$4,500 per acre.”²⁶ An expert observer has commented on these experiences as follows:

As a matter of fact, few, if any, really large-scale developments are ever built in areas which meet these standards (of health, recreation and other community facilities) because (a) difficulty of land assembly, and (b) land costs which drive the developer, either a private or public agency, to peripheral land.²⁷

Higher costs of land acquisition reduce the amount of money a developer will spend toward such amenities as adequate space around dwelling units, proper platting of land, for beauty, elimination of through traffic, and community facilities. The rectangular blocks of identical houses, with pocket handkerchief lawns in front and space only for a driveway between the houses, which are springing up on the outskirts of all our cities, are the slums of tomorrow. They have no more healthful environment, no fewer traffic hazards, than the slums of today. Some of the contributing factors have been described thus by Abrams:

The use of two lots instead of one would provide greater privacy and a better and more enduring neighborhood. And when raw land represents as little as 5 per cent of total cost, why should the developer insist on every fraction of profit from the sale and subdivision of land? The answer is that \$200 extra for a bigger lot makes little difference in the building of a single \$5000 house, but to a man who sells 1000 lots, each \$200 saved adds up to a difference of \$200,000.²⁸

25. “Concepts of Post War Planning,” *Urban Land Institute Bulletin*, Vol. II, No. 2, p. 8.

26. Section 6, p. 1.

27. Abner D. Silverman, “Housing Needs and Housing Standards,” *Land Economics*, XXV (February, 1949), 130.

28. *The Future of Housing* (New York: Harper & Bros., 1946), p. 105.

Among the housing standards lowered as a result of the unavailability of vacant land for housing is the standard of a reasonable population density.

In private use of urban lands further increase in urban densities is now generally the answer to the housing shortage due to lack of direction in metropolitan growth. No matter how much more desirable certain elements of Parkchester, as well as public developments of similar character, may be in comparison to the tenements of the East Side, construction of such densely populated residential developments is not only questionable as an investment but a flagrant example of what occurs when adequate social direction is not given metropolitan growth.²⁹

Thus it can be concluded that the unavailability of large areas of vacant land increases the cost of land, deprives developers of choice sites, deprives workers of close access to jobs, results in less healthy growth by encouraging cheap development, sometimes continues high densities, and in general prevents a satisfactory relief of critical housing needs.³⁰

4. *The effect of the unavailability of land upon industry.*—Increasing note is being taken of shortages in our major cities of good industrial land, particularly for the expansion of heavy industries. "One of the major factors contributing to the decentralization of industry to areas outside the city limits has been its inability to continue to obtain good sites free of existing development."³¹

This shortage is undoubtedly due in part to the lack, or less commonly, the laxity of enforcement, of prohibitions against nonindustrial uses in areas zoned for industry.³² A major contributing cause, in turn, of the absorption of industrial land for housing purposes is the sterilization of substantial residential areas in dead subdivisions and other vacant land.

5. *The effect of vacant land upon municipal finances.*—(a) *Tax delinquency.* The "dead" subdivision, which is owned by thousands of individual lot owners, is to a large extent tax delinquent.³³ The Cornick

29. Lillibridge, *op. cit.*, p. 45.

30. In many states, a legal brief on this issue might include (a) statistics on the existing housing shortage in specific communities and a showing of the need to encourage and facilitate the construction of additional homes by private and public construction, through the acquisition, preparation, and sale or lease of suitable sites; (b) a description of the need to achieve efficient and balanced community or neighborhood development in specific outlying urban areas; and (c) a description of the need to improve the relation of homes to places of work, thereby promoting and protecting productive efficiency and sound family life, and minimizing traffic and other civic problems.

31. Seward H. Mott and Max S. Wehrly, "The Prohibition of Residential Developments in Industrial Districts," *Urban Land Institute Technical Bulletin No. 10* (Washington, D.C., November, 1948), p. 2. See also "Industrial Areas," City Planning Commission of Cincinnati, 1946, pp. 5 ff.

32. Mott, *op. cit.*

33. *Local Planning and Zoning*, State of New York, Department of Commerce, July, 1948, p. 15.

study in New York State concluded that the owners of record of these tax-delinquent lots had essentially abandoned or forgotten them. But the notes issued in anticipation of the collection of such taxes must be paid; and they are paid in effect by the property owners who pay their taxes on time.

A reference to the tables indicates clearly that those taxpayers consist largely of the owners of improved properties. In short, as the depression increased in intensity, the harassed owners of improved property, who were already at their wit's end trying to meet their own fixed charges and taxes out of reduced incomes, had to find the means somehow of retiring with interest also the notes issued in anticipation of the collection of taxes levied against most of the vacant lots in premature subdivisions.³⁴

The Cook County study in Illinois showed that two outlying areas had 97 and 90 per cent of their tax-delinquent parcels vacant, while generally "the highest incidence of tax delinquent parcels was in the outlying sections of the city and corresponds closely with the vacant land in the city."³⁵

b) Wasted municipal services: Municipal services must be furnished to vacant areas and to built-up areas alike. The Cook County survey has summarized this drain upon the municipal treasury by vacant areas as follows:

POLICE. Abandoned subdivisions which lie in proximity to established neighborhoods invariably require regular police patrolling to combat loitering, use for immoral purposes, and criminal refuge.

FIRE. Grass fires occurring in "dead" land areas not only represent a direct, extra municipal expenditure but also endanger adjacent built-up areas.

SEWER. In all communities where "dead" land is improved with storm or sanitary sewers or both, at least a minimum of maintenance service must be performed even on the unused portions. A number of municipalities maintain their sewer lines in "dead" land at an even higher level in order to preserve the lines for future use.

WATER. When the water lines in "dead" land sections are important parts of the local distribution system they must be maintained at the same level of efficiency as the remainder of the system. If not of such importance they must still be preserved in good condition for future use.

STREETS. Especially in the case of thoroughfares, streets in "dead" land sections require virtually the same care as those in built up areas. This includes cleaning of litter, snow removal and physical maintenance.

STREET LIGHTING. If streets are thoroughfares providing access to built up sections, at least a minimum of lighting must be available.

WEED CONTROL. . . .³⁶

When, on an infrequent occasion, the owner of a parcel in a dead subdivision decides he wants to build and requests the city to get the

34. Cornick, *op. cit.*, p. 109.

35. *Dead Land*, p. 14.

36. *Ibid.*, p. 20.

necessary improvements in condition to provide his family with an adequate environment, the cost to the city of satisfying such a request is naturally disproportionate.³⁷

c) *Increased cost of extended public facilities to outlying new developments*: While the consolidation of present densities is not advocated as a solution to municipal problems, the estimate is nevertheless significant that a contiguous grouping of the diffuse settlements in New York City would reduce the city's annual operating costs by \$43,000,-000.³⁸

A similar increase in municipal expenditures was noted by the director of planning of the city of Los Angeles in describing the scattering of developments to the city's outlying areas; thus, in the Van Nuys section, a trunk line sewer had been extended a distance of six miles beyond the developed area to serve small communities, and was maintained for twenty years before the intermediate area was built up. It was further pointed out that: "The City has also provided highways and schools to serve other small urban nuclei which formed in various parts of the valley."³⁹

The Chicago study also discussed the expenses to the municipality of servicing new developments on the outskirts of the city:

In communities where "dead" land areas lie adjacent to older built up areas, new building is often forced to the outskirts of the corporate limits or into unincorporated areas. If these areas of new building are located within municipal boundaries, the municipalities must, of course, extend services to the new developments. This applies in all cases to police, fire and similar services and may at times include extension of sewer and water lines. This "long haul" has the same effect on the tax rates as did the "spreading thin" noted in the case of scattered development, the unit cost of servicing being increased by the necessity of traversing vacant non-productive areas. By the same token, development of such non-revenue producing areas would decrease the unit cost of services.⁴⁰

These problems are not confined to the large cities of our country, and on a per capita basis the cost of extravagant extension of municipi-

37. This point should be documented with local examples, if available.

38. Robert H. Armstrong and Homer Hoyt, "Decentralization in New York City: A Preliminary Report to the Urban Land Institute," January, 1941, at p. 13. In 1951 dollars this estimate undoubtedly would be substantially higher.

39. Letter to Ira S. Robbins from Charles B. Bennett, April 19, 1950. The same letter pointed out that bad subdivision pattern and lack of improvements in dead subdivisions north of the city of South Pasadena have caused these areas to be passed over for development in areas beyond. See also Harris and Ullman, "The Nature of Cities," 242 *Annals* 7, 1945.

40. *Op. cit.*, note 62, pp. 21-22. The same considerations apply to the provision of transit services. The unit cost of transportation is increased by the necessity of traversing mileage that produces few if any passengers and of serving scattered communities. Costs may be so increased as to make the service uneconomic altogether and lead to denial or curtailment of service. It would be desirable to illustrate these cost arguments by concrete examples.

pal services may constitute an even more intolerable burden in a small city than in a metropolis. In his study *Planning for the Small American City*, Russell Van Nest Black has stated:

The tendency in American cities has been toward a wasteful scattering of development, like a small boy in a pansy bed, destroying more flowers than he picks. Reasonable concentration of development, especially in the smaller cities, should be encouraged so far as possible by the form of the plan and by its administration. Street paving and the supplying of other services to scattered houses and widely spread real estate developments is expensive. Moreover, socially, concentration of the city's living quarters and the preservation of unspoiled farm land, parks, and other open space, is preferable to breaking out over the landscape with half developed streets and a sprinkling of houses.⁴¹

6. *Waste involved, in general, in the movement of population outside city limits.*—As has been noted above, satellite communities beyond the city limits have been showing a consistently more rapid increase in population than the city itself.⁴² An examination of the reasons for such exodus made in Milwaukee County, Wisconsin, concluded that it was prompted by:

A general desire to gain the benefits of the more open country rather than by an expulsive force of a given district within the city. People leave the cities because they believe the rural areas are better places to raise children, are less congested; are cleaner and provide larger lots.⁴³

Thus it appears that the cities have built up enormous and expensive facilities to service populations which are drifting away in their search for a decent living environment. Yet, nearly every American city has vacant land within its borders which, with planned development, combined with the redevelopment of its blighted areas, could house all or nearly all its population at densities that would provide adequate recreation space, attractive neighborhoods, and a decent living environment for all its residents.

The municipalities lose revenues and the other benefits which they would otherwise enjoy from the settling of this population in fine communities within their borders. But the municipalities are not the only losers. The migrant families, on the move for better living, want to take with them the standards of an urban way of life,⁴⁴ and in this they

41. Chicago: Public Administration Service, 1944, p. 60.

42. Thompson, *op. cit.*, pp. 5-8.

43. Richard Dewey, "Residential Development in the Unincorporated Areas of Milwaukee County, Wisconsin," Milwaukee County Regional Planning Department, 1946.

44. "The dweller in this area is seeking a cleaner, less congested community in which he can live an urban way of life. . . . The movement into the rural-urban fringe is not a desire to escape anything that is inherent in urbanism as a way of life." Richard Dewey, "Peripheral Expansion in Milwaukee County," *American Journal of Sociology*, LIV (September, 1948), 118. Cf. Betty Tableman, *Intra-Community Migration in the Flint*

are often bound to be disappointed. The Chicago study of "Dead Land" has reviewed these wasteful aspects of the centrifugal process as follows:

Dead land's contribution to this process lies, of course, in its fostering of development in outlying unincorporated areas or in newly incorporated areas. Much of the development so fostered would . . . have been of material benefit both to the municipalities where it might more logically have been built and to the consumer who would have benefitted from the higher level of services offered by established communities. . . .

Then there is also the whole gamut of wastage which affects the consuming public and the economy generally in the case of disorderly metropolitan expansion. There is the long distance between place of residence and place of employment, with wastage of both human and mechanical energy in traversing them. There is the wastage of extending and maintaining public utility lines. There are the poor land use patterns established because of less stringent controls, less stringent because there is no cohesive community to demand greater protection.⁴⁵

The United States Public Health Service has repeatedly called attention to the danger that these satellite areas will become the slums of tomorrow. Testifying before Congress, Dr. Leonard A. Scheele, surgeon general of the United States, spoke as follows:

I might say here it is exceedingly important that the new housing going up currently in our fringe areas not be in fact the slum areas of tomorrow. Already slums of the future are being constructed in many urban fringe areas. . . . The scope of this problem becomes more apparent when we recall that more than three-quarters of the post war housing units in the metropolitan areas of Atlanta, San Francisco, and Washington have been built outside the limits of the central city. . . . In my opinion, strong action is needed to remedy conditions that exist in these areas, and to prevent further development of such menaces to public health.⁴⁶

In like vein, an official bulletin of the United States Public Health Service states:

In addition to the problems of large cities traceable to the forces of decentralization, these same forces are giving rise to many problems in newly developed suburban areas where unplanned or poorly planned communities give promise of becoming the slums of tomorrow. To a considerable extent the provision of adequate sanitation facilities is a crucial problem upon which the success or failure of these developing areas will depend.

In many places . . . even public water supply facilities are not being provided, although building lots are so small that safe water supplies cannot be obtained on

Metropolitan District (Institute for Human Adjustment, University of Michigan, September, 1948), chap. v. The filing of 200,000 applications for Stuyvesant Town's 8,755 units in New York City attests to a lively interest in city living.

45. *Op. cit.*, pp. 26-27.

46. "Hearings before a Subcommittee of the Committee on Banking and Currency, United States Senate, 81st Congress on . . . Bills pertaining to General Housing Legislation, February 1949," pp. 437-38.

the property. The problems of sewerage and disposal of refuse are more complicated. Frequently topography complicates the problem; for example, where a newly developed area does not drain toward existing sewers.

In many of these new subdivisions individual sewerage disposal systems are being installed. . . . As a result [unless unusually good drainage conditions prevail] insanitary conditions develop which are not only detrimental to health but cause property values to decline. In these same areas garbage and refuse disposal facilities are frequently primitive and not subject to effective regulation in the interests of health. [Material in brackets supplied.]⁴⁷

And so the circle is completed. While the cities remain stultified by congestion and inertia, untapped resources of vacant land hold out promise of relief to city dwellers. The city's population flees to fringe areas, thereby denying the city the benefits of healthy growth, and at the same time creating new housing problems for the future.

7. Desirability of controlled development of outlying city area.—A vivid description of the environment created by the uncontrolled spread of population from the centers to the peripheries of our cities is given by Abrams:

It is the developer who decides where he will operate; and cities meekly conform, providing schools, streets, sewers, and recreational facilities. The city often has little to do with determining its own future patterns. Rarely does any one private individual hold as much unrestricted power over the living patterns of the generations to succeed him as the developer. . . .

So sites are neatly carved into rigid rectangular patterns. Visions of fabulous appreciation in value help the subdivider unload his land on little home buyers for home sites. The dirt farmer on the city's periphery plants carrot seeds hoping to reap gold in a not too distant harvest. (More probably the rise in assessments and taxes will force him to sell out and seek cheaper farmland.) The large estate, once separated from the crowded city, surrenders to the approaching subdivider. Land, too far from transportation or stores, land along dangerous highways, land without schools, parks or playgrounds, swampland to be later drained by the city, land with its rich topsoil stripped and sold by the yard—all this is being chopped into small portions and sold off to the expanding and sprawling population that has almost stopped expanding but still sprawls.

No land will be reserved for park or recreational use if it can be sold. Old trees and grassy slopes, surpassing those that metropolitan park departments spend years to develop, are obliterated by steam shovels. If any park area is included, it is usually wrung out of the last remaining quarter acre, too late and too small to remedy the harm of bad planning.⁴⁸

47. "Nationwide Inventory of Sanitation Needs," *Public Health Reports*, Supplement 204, April 1948, p. 37.

48. *Op. cit.*, pp. 105-6. NOTE: In a few jurisdictions, there is language in either zoning enabling acts or in court decisions that indicates that zoning ordinances may be justified or sustained on the basis of economic benefit to the municipality. In such jurisdictions the analogy between the exercise of the police power through zoning and the exercise of the power of eminent domain may be used as an argument to support the thesis that the courts consider economic benefit to a municipality in determining whether or not a proposal is for the public benefit or welfare (see Edward T. Landels, "Zoning—An Analysis of the Purposes and Legal Sanctions," *American Bar Association Journal* [March, 1931], p. 163).

8. *Strategic considerations.*—The requirements of civil defense for an orderly development of outlying areas are being urged by the National Security Resources Board. Thus, in its brochure, "National Security Factors in Industrial Location," the board has stated: "There is no known military defense against the atomic bomb itself except space. . . . Adequate dispersion is the most practical solution."⁴⁹ Spokesmen for the board have amplified this theme:

. . . we of the National Security Resources Board believe with confidence that the healthy trends toward better spacing which have been, and which are now, observable in our economy will raise our economic potential and strengthen our free society—and, at the same time, provide sensible protection in the Atomic Age. The problem calls for time, for cooperation, and for counsel and exchange of information among government, industry, and local and state planning agencies.⁵⁰

The condemnation of vacant land for redevelopment implements important national defense policy in that it facilitates, on an orderly basis and free from congestion, the dispersal of industry and population.

B. CONDEMNATION OF OPEN AND PREDOMINANTLY OPEN LAND NEEDED FOR SOUND COMMUNITY GROWTH WOULD CONFER A SUBSTANTIAL PUBLIC BENEFIT

There is growing recognition of the fact that the use of urban land is a matter of urgent public concern.

The basic problem then is not private exploitation alone but also our failure to realize that the tenure and use of urban land are matters of urgent public concern; that a larger measure of protection for socially beneficial private uses and of public ownership of land would be in the public interest; that orderly and speedy reform is essential to the present well-being and future progress of our cities.⁵¹

The now generally accepted exercise of the zoning power to prevent the antisocial use of land was once thought to provide a solution to problems of urban land use. But with dwindling resources of land available for growth, it became apparent that further public powers must be invoked. Accordingly the legislature has enlisted the aid of the power of eminent domain to free potentially available urban land for beneficial use.

In the case of "dead" or arrested subdivisions, the exercise of the governmental power of compulsory land assembly is made necessary by diversity of ownerships, complicated titles, lots unsuitable for building, extensive abandonment of parcels, and tax delinquency. In the

49. Washington, D.C., September, 1948.

50. Ralph J. Watkins, address entitled "Strategic Location of Industry," before the National Citizens Conference on Community Planning, conducted by the American Planning and Civic Association, at Oklahoma City, Oklahoma, March 28, 1949. Consult also the special issue on "Civil Defense against Atomic Attack," *Bulletin of the Atomic Scientists*, Vol. VI (August–September, 1950) (includes bibliography, pp. 272–75).

51. "Our Cities: Their Role in the National Economy," National Resources Committee, June, 1937, p. 59.

case of vacant unsubdivided land, such condemnation is necessary because the public's need to have the land put to use is so urgent it cannot wait until the landowner may find a purchaser willing to meet his price.

As Guy Greer has stated, "the end of laissez faire in the disposition of urban land is long overdue. The only question now is how the necessary control shall be exercised."⁵² This is so because "where present and future welfare of the community has been sacrificed for immediate individual gain, we find the familiar blighted districts, the wasteful improvement-scarred areas, and the high costs to the community."⁵³ "Needed are powers to control the use of land—the power to buy it, use it, hold it, lease it or resell it—far beyond anything ever deemed necessary or proper in the United States."⁵⁴

The public welfare cannot long await such reforms. As Lewis Mumford has stated:

In America, where in some respects the mischiefs of contemporary urban civilization have been carried farthest, the greater part of our overgrown metropolises are, in strict economic terms, bankrupt: their dwindling taxes cannot support the load of debt incurred through growth, disorganization, and blight; and their urgent repair awaits a systematic deflation of the still absurd structure of values that was created in the past, in anticipation of future growth.⁵⁵

It is logical that if the governmental power of condemnation can be used to wipe out blight in central built-up areas of the city as a hazard to health and welfare, the cities can constitutionally act to *prevent* the development of blight. Moreover, the cities should by the same token have the constitutional power to make available for "sound community growth" vacant land whose development would otherwise be postponed for a generation, particularly since the unavailability of such land contributes to blight and congestion.

The danger of postponing governmental action until after development has taken place has been pointed out by industrial advisers in discussing the location of new industry:

Planning can be far more effective at the outset, when a major industry first decides to enter a community. It is better and more economical to do than to undo, to use foresight rather than hindsight. The saving will show up for years in the tax rate. Changes in street lay out, shifts in neighborhood characteristics, provisions to meet the increased demands on water mains and bus lines are easier to work out earlier than late.⁵⁶

52. "After the Plans, What?" *Fortune* (July, 1944), p. 169. See also Louis Justement, *New Cities for Old* (New York: McGraw-Hill Book Co., 1946), chap. 5.

53. Robert E. Merriam, *The Subdivision of Land: A Guide for Municipal Officials in the Regulation of Land Subdivision* (Chicago: American Society of Planning Officials, 1942), p. 2.

54. Greer, *op. cit.*, p. 216.

55. *City Development* (New York: Harcourt, Brace & Co., 1945), p. 161.

56. Watson, "Industry—Town Planning," 84 *Trusts and Estates* 27 (1947).

The same article puts the question: "Will lack of foresight lay the foundation for future slums, for human as well as traffic congestion?"

The answer to this question will lie quite largely with the courts, for legislation which would enable cities to act effectively is on the books.

Thus, one of the chief shortcomings of early legislation is the limitation of the definition of blighted areas to the deteriorated and worn-out sections of our cities. The newer legislative approach has been to allow cities to designate districts of arrested development as blighted. For most cities have extensive areas of predominantly vacant land, usually in the outskirts, which are blighted just as truly as their slum or near-slum neighborhoods. Far from having gone downhill, these sections, by reason of poor subdivision plans, the existence of scattered industry, and drainage and grading problems have never amounted to anything. The obstacles to proper development are beyond the power of individual owners to overcome. Community action is required to replan and rebuild on a broad scale.⁵⁷

Shown the tremendous cost to municipalities and the sacrifices of human values inherent in continued adherence to old patterns of land tenure, the courts can properly be expected to extend the doctrine of public use sufficiently to permit the state to protect the welfare of its citizens in this as in other fields. Thus by intelligent co-ordinated effort we may avoid the urban doom described by Henry S. Churchill:

In this tiny span of a century we have added years to our lives and millions to our population through the technological miracles of medical science, engineering skill and biochemical research. . . . We have moved from an era of convinced scientific materialism, in which spirit and matter were dogmatically separate, into an era in which, even as in primitive times, they are conclusively inseparable.

In those same hundred years our cities have swollen out of all reason. Whereas then about one third of our people lived in cities, now well over half live in cities,—cities that have not kept pace with the changes of science and technology. We have created a new world, but our children can expect to spend their seventy years living in cities that will frustrate and stultify them, that will reduce their reproductivity, that will send a terrifyingly large proportion of them to psychiatric institutions.⁵⁸

57. Wetmore and Milne, "Rebuilding Our Cities—Is There Any Progress?" *American City* (March 1948), pp. 94-95.

58. "Some Reflections on Planning," *Journal of the American Institute of Planners*, XV (Fall, 1949), 21.

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